SONY

4-242-678-**11**(4)

Stylish AV System

Operating Instructions

DAV-DS1000

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WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

To prevent fire, do not cover the ventilation of the apparatus with newspapers, table-cloths, curtains, etc. And don't place lighted candles on the apparatus.

To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.

This appliance is classified as a CLASS 1 LASER product. The label is located on the bottom exterior of the Control unit.

Don't throw away the battery with general house waste, dipose of it correctly as chemical waste.

Precautions

Safety

- If anything falls into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- The unit is not disconnected from the mains as long as it is connected to the mains outlet, even if the unit itself has been turned off.
- Unplug the unit from the wall outlet if you do not intend to use it for an extended period of time. To disconnect the cord, pull it out by the plug, never by the cord.

Installing

- Allow adequate air circulation to prevent internal heat buildup.
- Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation slots.
- Do not install the unit near heat sources such as radiators, or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration, or shock.
- Do not install the unit in an inclined position. It is designed to be operated in a horizontal position only.
- Keep the unit and discs away from equipment with strong magnets, such as microwave ovens, or large loudspeakers.
- Do not place heavy objects on the unit.
- If the unit is brought directly from a cold to a warm location, moisture may condense inside the Stylish AV System and cause damage to the lenses. When you first install the unit, or when you move it from a cold to a warm location, wait for about 30 minutes before operating the unit.
- Install the speakers out of the way, so as not to trip on the cords. The speaker may fall down, causing an injury or system damage.

Welcome!

Thank you for purchasing Sony Stylish AV System. Before operating this system, please read this manual thoroughly and retain it for future reference.

Precautions

On safety

- Should any solid object or liquid fall into the cabinet, unplug the system and have it checked by qualified personnel before operating it any further.
- Do not climb on the subwoofer, as you may fall down and injure yourself, or system damage may result.

On power sources

AC power cord must be changed only at the qualified service shop.

On placement

- Place the system in a location with adequate ventilation to prevent heat build-up in the system.
- At high volume, over long periods of time, the cabinet becomes hot to the touch. This is not a malfunction. However, touching the cabinet should be avoided. Do not place the unit in a confined space where ventilation is poor as this may cause overheating.
- Do not block the ventilation slots by putting anything on the system. The system is equipped with a high power amplifier. If the ventilation slots on the top surface are blocked, the unit can overheat and malfunction.
- Do not place the system on a soft surface such as a rug that might block the ventilation holes on the bottom.
- Do not place the system in a location near heat sources, or in a place subject to direct sunlight, excessive dust, or mechanical shock.

On operation

- If the system is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the system. Should this occur, the system may not operate properly. In this case, remove the disc and leave the system turned on for about half an hour until the moisture evaporates.
- When you move the system, take out any discs. If you do not, the disc may be damaged.
- For power saving purposes, the system can be completely turned off by the ⏻ button on the subwoofer. Though the LED remains lit for a while, the system is completely off.

On adjusting volume

Do not turn up the volume while listening to a section with very low level inputs or no audio signals. If you do, the speakers may be damaged when a peak level section is suddenly played.

On cleaning

Clean the cabinet, panel, and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

If you have any questions or problems concerning your system, please consult your nearest Sony dealer.

On cleaning discs

Do not use a commercially available CD/DVD cleaning disc. It may cause a malfunction.

On your TV's colour

If the speakers should cause the TV screen to have colour irregularity, turn off the TV at once then turn it on after 15 to 30 minutes. If colour irregularity should persist, place the speakers further away from the set.

The nameplate is located on the bottom exterior of the Control unit and the Tuner.

IMPORTANT NOTICE

Caution: This system is capable of holding a still video image or on-screen display image on your television screen indefinitely. If you leave the still video image or on-screen display image displayed on your TV for an extended period of time you risk permanent damage to your television screen. Projection televisions are especially susceptible to this.

On carrying the system

When you carry the system, use the following procedure to protect the inner mechanism. Remove an inserted disc by pressing ⏏. After removing the disc, press ⏏ again to close the disc shutter. Wait at least 10 seconds after the disc shutter closes, and then turn off the system. If more than 10 seconds have passed with no disc in the system and the disc shutter closed, turn off the system.

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About This Manual

- The instructions in this manual describe the controls on the remote. You can also use the controls on the control unit if they have the same or similar names as those on the remote.
- The icons used in this manual are explained below:

Icon	Meaning	Icon	Meaning
DVD	Functions available in DVD video mode	SA-CD CD	Functions available in Super Audio CD and Audio CD mode
VIDEO CD	Functions available in VIDEO CD mode	MP3	Functions available for MP3* audio tracks
CD	Functions available in CD mode		More convenient features

* MP3 (MPEG1 Audio Layer 3) is a standard format defined by ISO/MPEG which compresses audio data.

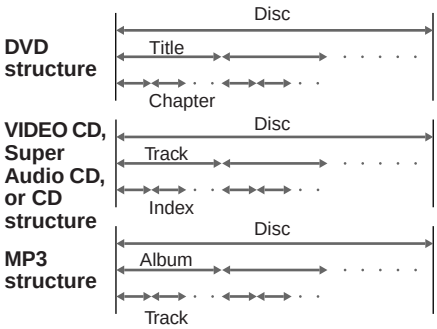
This System Can Play the Following Discs

Format of discs	
DVD VIDEO	DVD VIDEO
Super Audio CD	SUPER AUDIO CD
VIDEO CD	COMPACT disc DIGITAL VIDEO
Music CD	COMPACT disc DIGITAL AUDIO TEXT

The “DVD VIDEO” logo is a trademark.

Terms for discs

- **Title**
  The longest sections of a picture or music feature on a DVD, movie, etc., in video software, or the entire album in audio software.
- **Chapter**
  Sections of a picture or a music piece that are smaller than titles. A title is composed of several chapters. Depending on the disc, no chapters may be recorded.
- **Album**
  Section of a music piece on a data CD containing MP3 audio tracks.
- **Track**
  Sections of a picture or a music piece on a VIDEO CD, Super Audio CD, CD, or MP3.
- **Index (Super Audio CD, CD) / Video Index (VIDEO CD)**
  A number that divides a track into sections to easily locate the point you want on a VIDEO CD or Super Audio CD. Depending on the disc, no indexes may be recorded.
- **Scene**
  On a VIDEO CD with PBC functions (page 40), the menu screens, moving pictures and still pictures are divided into sections called “scenes.”



Note on PBC (Playback Control) (VIDEO CDs)

This system conforms to Ver. 1.1 and Ver. 2.0 of VIDEO CD standards. You can enjoy two kinds of playback depending on the disc type.

Disc type	You can
VIDEO CDs without PBC functions (Ver. 1.1 discs)	Enjoy video playback (moving pictures) as well as music.
VIDEO CDs with PBC functions (Ver. 2.0 discs)	Play interactive software using menu screens displayed on the TV screen (PBC Playback), in addition to the video playback functions of Ver. 1.1 discs. Moreover, you can play high-resolution still pictures, if they are included on the disc.

Region code

Your system has a region code printed on the bottom of the control unit and will only play DVDs labelled with the same region code.

DVDs labelled ⊕ will also play on this system.
If you try to play any other DVD, the message “Playback prohibited by area limitations.” will appear on the TV screen. Depending on the DVD, no region code indication may be given even though playing the DVD is prohibited by area restrictions.

continued

Examples of discs that the system cannot play

The system cannot play the following discs:
- CD-ROMs (PHOTO CDs included)
- CD-Rs/CD-RWs other than those recorded in the following formats:
  – music CD format
  – video CD format
  – MP3 format that conforms to ISO9660* Level 1/Level 2, or its extended format, Joliet
- Data part of CD-Extras
- DVD-ROMs
- DVD Audio discs

* A logical format of files and folders on CD-ROMs, defined by ISO (International Standard Organization)

Do not load the following discs:
- A DVD with a different region code (page 7, 80).
- A disc that is neither standard nor circular (e.g., card, heart, or star shape).
- A disc with paper or stickers on it.
- A disc that has adhesive, cellophane tape, or a sticker still left on it.

Note on playing CD-R/CD-RW/DVD-R/DVD-RWs (Video mode)

Some CD-Rs, CD-RWs, DVD-Rs, or DVD-RWs (Video mode) cannot be played on this system, depending upon the recording quality or physical condition of the disc, or the characteristics of the recording device. Furthermore, a disc will not play if it has not been correctly finalized. For more information, see the operating instructions for the recording device. Note that discs created in the Packet Write format cannot be played.

Music discs encoded with copyright protection technologies

This product is designed to playback discs that conform to the Compact Disc (CD) standard.
Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not comform to the CD standard and may not be playable by this product.

Note on playback operations of DVDs and VIDEO CDs

Some playback operations of DVDs and VIDEO CDs may be intentionally set by software producers. Since this system plays DVDs and VIDEO CDs according to the disc contents the software producers designed, some playback features may not be available. Also, refer to the instructions supplied with the DVDs or VIDEO CDs.

Copyrights

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents, other intellectual property rights owned by Macrovision Corporation, and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

This system incorporates with Dolby* Digital and Dolby Pro Logic (II) adaptive matrix surround decoder and the DTS** Digital Surround System.

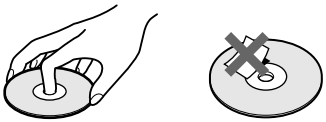
* Manufactured under license from Dolby Laboratories.
"Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.

** Manufactured under license from Digital Theater Systems, Inc.
"DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc.

Notes About the Discs

On handling discs

- To keep the disc clean, handle the disc by its edge. Do not touch the surface.
- Do not stick paper or tape on the disc.



- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as the temperature may rise considerably inside the car.
- After playing, store the disc in its case.

On cleaning

- Before playing, clean the disc with a cleaning cloth.
  Wipe the disc from the center out.

- Do not use solvents such as benzine, thinner, commercially available cleaners, or anti-static spray intended for vinyl LPs.

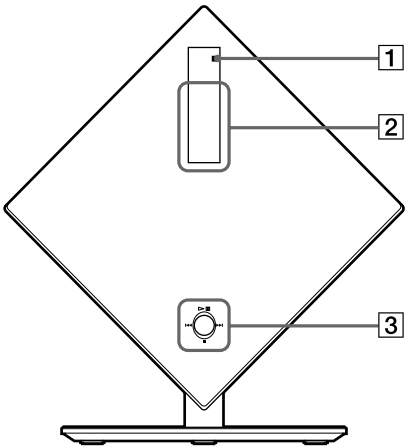
This system can only play back a standard circular disc. Using neither standard nor circular discs (e.g., card, heart, or star shape) may cause a malfunction.

Do not use a disc that has a commercially available accessory attached, such as a label or ring.

Index to Parts and Controls

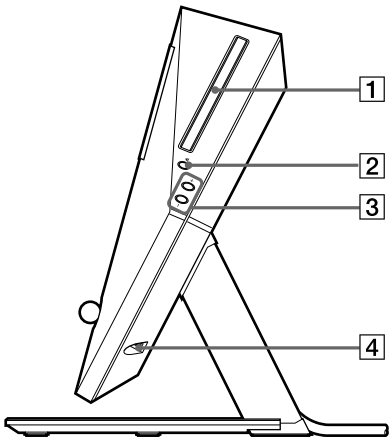
For more information, refer to the pages indicated in parentheses.

Control unit



■Front panel

1 ⎘ (remote sensor) (18)
2 Front panel display (11)
3 Control button (▷II, I◀◀ /▶▶I, PRESET –/+, ■, BAND, PUSH FUNCTION) (37)

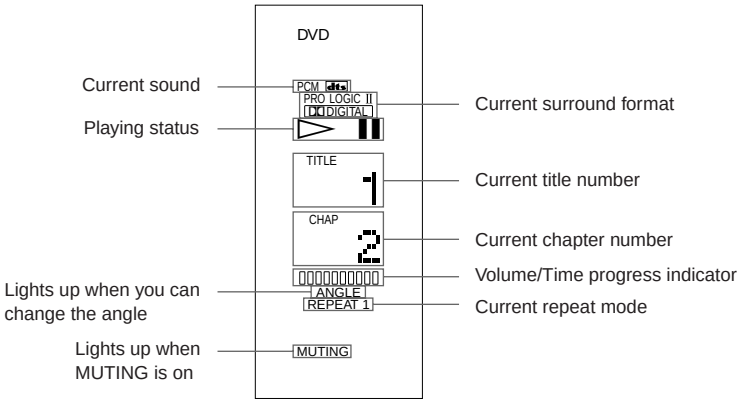


■Side panel

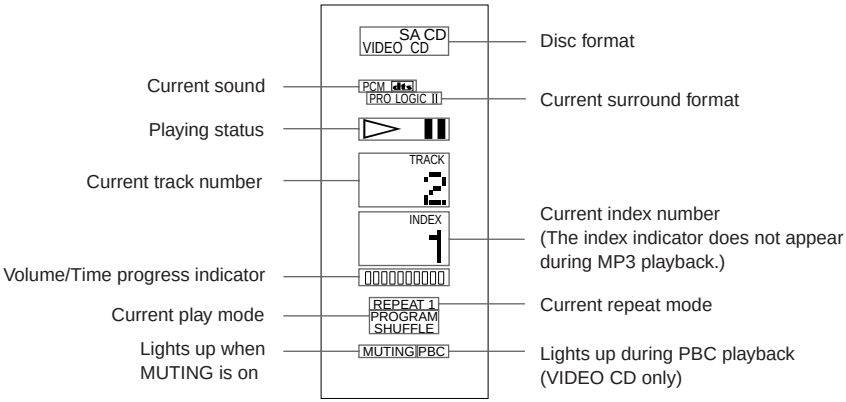
1 Disc shutter/ Disc slot (36)
2 ⏏ (open/close) (36)
3 VOLUME –/+ (36)
4 PHONES jack (36)

Front panel display

■When playing back a DVD

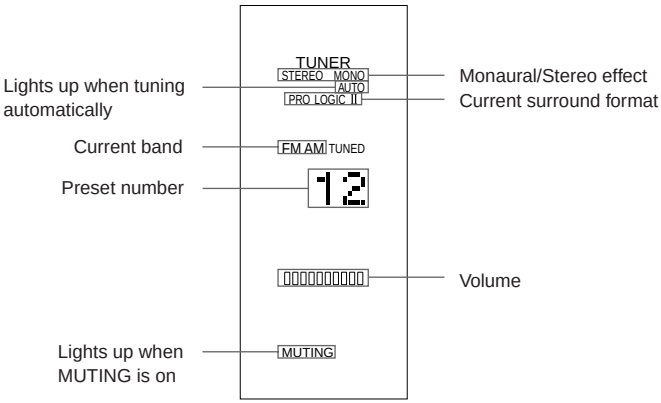


■When playing back a Super Audio CD, CD, VIDEO CD, or MP3

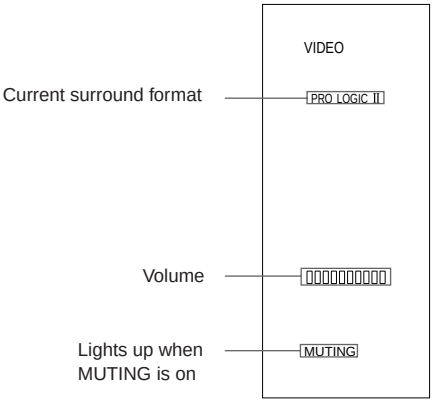


continued

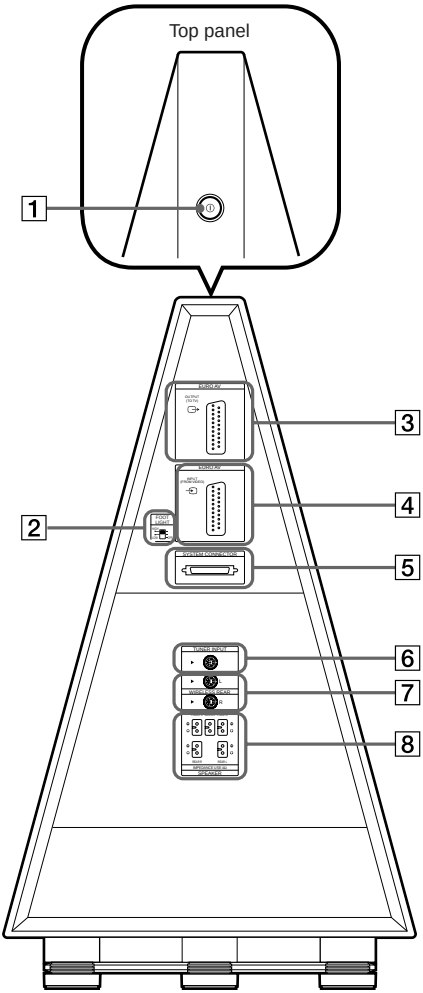
■When listening to the radio



■When listening to connected video component



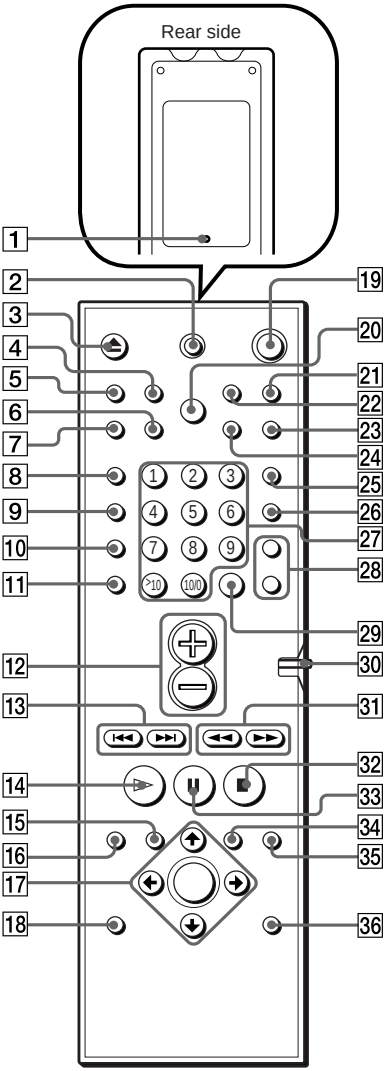
Subwoofer



1 ⏻ (power) button/(on/standby) indicator (36)
2 FOOT LIGHT switch (68)
3 EURO AV OUTPUT (TO TV) jack (26, 72)
4 EURO AV INPUT (FROM VIDEO) jack (27)
5 SYSTEM CONNECTOR jack (19)
6 TUNER INPUT jack (25)
7 WIRELESS REAR L/R jacks (20)
8 SPEAKER jacks (20, 24)

continued

Remote



Note

This remote control glows in the dark. However, before glowing, the remote must be exposed to light for awhile.

1 RESET button (18)
2 TV I/⏻ (on/standby) (63)
3 ⏏ (open/close) (36, 38)
4 NAME (66)
5 STEREO/MONO (65)
6 MEMORY (34)

7 CLEAR (42, 44, 45, 47)
8 PLAY MODE (42, 44)
9 AUDIO (50)
10 ANGLE (56)
11 SUBTITLE (57)
12 VOL +/– (63, 65)

13 ⏮/⏭ PREV/NEXT, TV CH –/+, PRESET –/+ (34, 38, 40, 63, 65)
14 ▷ PLAY/SELECT (36, 38, 40, 42, 44, 45, 46, 59)
15 DVD TOP MENU (39)
16 DVD DISPLAY (41, 44, 45, 47, 49, 50, 56, 57, 58)
17 ←/↑/↓/→/ENTER (34, 39, 40, 41, 42, 44, 45, 47, 50, 56, 57, 58, 59, 66, 69)
18 DVD SETUP (59, 69)

19 ⏻ (standby) (36, 65)
20 DIMMER (67)
21 TV/VIDEO (63)
22 REPEAT (42, 45)
23 MUTING (38)
24 TIME (49)

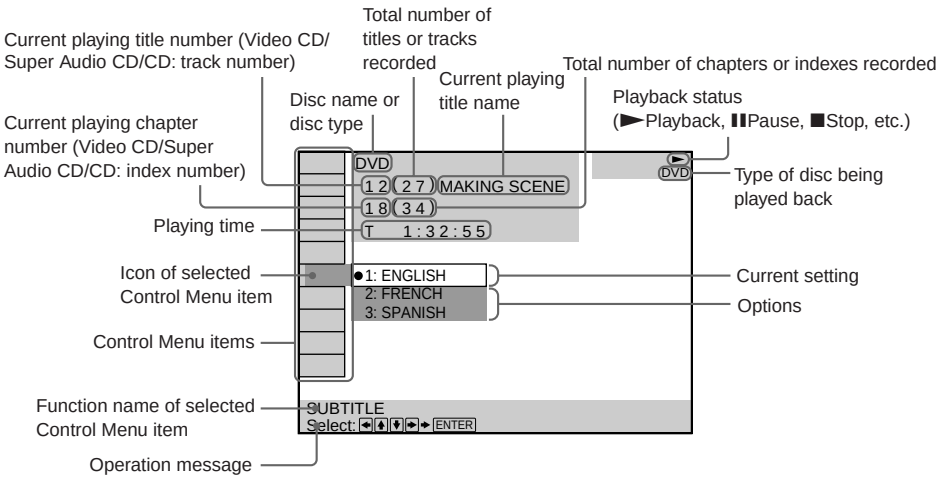
25 FUNCTION (34, 36, 64, 65, 66)
26 BAND (34)
27 Number buttons (39, 40, 42, 47, 56, 58, 59, 63)
28 SOUND FIELD +/– (52, 55)
29 ENTER (63)
30 COMMAND MODE DVD/TV switch (63)

31 ◀◀/▶▶/◀❙/❙▶ SLOW, TUNING –/+ (34, 46, 65)
32 ■ STOP (36, 38, 40, 58)
33 ❙❙ PAUSE (38)
34 DVD MENU (39)
35 ↩ RETURN (40, 41, 58, 59)
36 DISPLAY (52, 55, 65)

Guide to the Control Menu Display

Use the Control Menu to select a function that you would like to use. The Control Menu display appears when the DVD DISPLAY button is pressed. For details, refer to the page in parentheses.

Control Menu


Current playing title number (Video CD/ Super Audio CD/CD: track number)
Total number of titles or tracks recorded
Current playing title name
Total number of chapters or indexes recorded
Disc name or disc type
Playback status (►Playback, ❚❚Pause, ■Stop, etc.)
Current playing chapter number (Video CD/Super Audio CD/CD: index number)
Type of disc being played back
Playing time
Icon of selected Control Menu item
Current setting
Options
Control Menu items
Function name of selected Control Menu item
Operation message
DVD
1 2 2 7 MAKING SCENE
1 8 3 4
T 1 : 3 2 : 5 5
1: ENGLISH
2: FRENCH
3: SPANISH
SUBTITLE
Select: ENTER

List of Control Menu Items

DISC	Displays the disc name or the disc type inserted into the system.
TITLE (DVD only) (page 47)/ SCENE (only VIDEO CD in PBC playback) /TRACK (VIDEO CD only) (page 47)	Selects the title (DVD), the scene (VIDEO CD in PBC playback), or the track (VIDEO CD) to be played.
CHAPTER (DVD only) (page 48)/INDEX (VIDEO CD only) (page 48)	Selects the chapter (DVD) or the index (VIDEO CD) to be played.
ALBUM (MP3 only) (page 41, 47)	Selects the album (MP3) to be played.
TRACK (Super Audio CD/ CD/MP3 only) (page 41, 47)	Selects the track (Super Audio CD/CD/ MP3) to be played.
INDEX (Super Audio CD/CD only) (page 48)	Displays the index and selects the index (Super Audio CD) to be played.

continued

TIME (page 48)	Checks the elapsed time and the remaining playback time. Inputs the time code for picture and music searching.
AUDIO (DVD/VIDEO CD/ Super Audio CD/CD only) (page 50)	Changes the audio setting.
SUBTITLE (DVD only) (page 57)	Displays the subtitles. Changes the subtitle language.
ANGLE (DVD only) (page 56)	Changes the angle.
PLAYMODE (VIDEO CD/ Super Audio CD/CD/MP3 only) (page 44)	Selects the play mode.
REPEAT (page 45)	Plays the entire disc (all titles/all tracks), one title/chapter/track/album, or contents of programme repeatedly.
CUSTOM PARENTAL CONTROL (page 58)	Sets the disc to prohibit playing.

Each time you press DVD DISPLAY, the Control Menu display changes as follows:

Control Menu display
↓
Control Menu display off

The Control Menu items are different depending on the disc.

The Control Menu icon indicator lights up in green → unless you set the REPEAT setting to "OFF."
The "ANGLE" indicator lights up in green only when the angles can be changed.

Quick Overview

This chapter presents a quick overview so you can begin enjoying your new system right away.
For selecting a language used in the on-screen display, refer to the page 70.
For selecting the aspect ratio of the TV to be connected, refer to the page 71.

Unpacking

Check that you have the following items:
• Subwoofer (1)
• Center speaker (1)
• Front speakers (2)
• Wireless rear speakers (2)
• Control unit (1)
• Tuner (1)
• Remote Commander (Solar type remote) RM-SS1000 (1)
• Remote Commander (Battery type remote) RM-SS1000B (1)
• R6 (size AA) batteries (2)
• Rear cover (for subwoofer) (1)
• Speaker cords (5m × 3, 20m × 2)
• Tuner cord (MINI DIN 8 pin, 2m × 1)
• FM wire aerial (1)
• Wireless data output cords (for front speakers) (MINI DIN 6 pin, 5m × 2)
• SCART (EURO AV) cords (3m × 2)
• Mains leads (for rear speakers) (2)
• Cushions (for center speaker) (4)
• Operating Instructions (1)
• Speakers connection and Installation (card) (1)

Using the Remote

You can control the system using the supplied remote. The remote control of this system employs a solar panel for indoor use that can get enough battery from normal lighting in the room. To avoid excessive battery consumption, make sure that the remote is always placed in a brightly lit place facing up. This way, the battery will remain charged.
When using the remote, point it at the remote sensor R on the control unit.

Notes

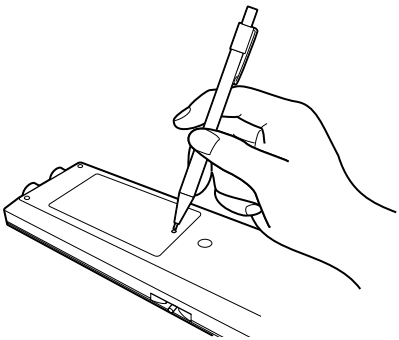
- Do not leave the remote in an extremely hot or humid place.
- Do not expose the remote sensor to direct light from the sun or lighting apparatus. Doing so may cause a malfunction.
- Do not expose the solar panel of the remote to direct sunlight as it may be damaged.
- If the remote is placed with its rear side up, or left in a dark place for long periods, battery charging will not occur and further use will lead to battery discharge (the remote becomes unusable).
- Placing objects on the remote may results in buttons being pressed for long periods and shortened battery life.
- As the battery runs out, the operating range of the remote becomes shorter.

Should the battery become exhausted, charge it by placing the remote in a brightly lit room, more than 5 days. Charging time will vary depending on how bright the room is.

The battery is fully charged before shipment. So you can use the remote for 340 days (100 times use per day) without any solar charging.

When the remote does not function even after the solar battery is charged in the light of the room.

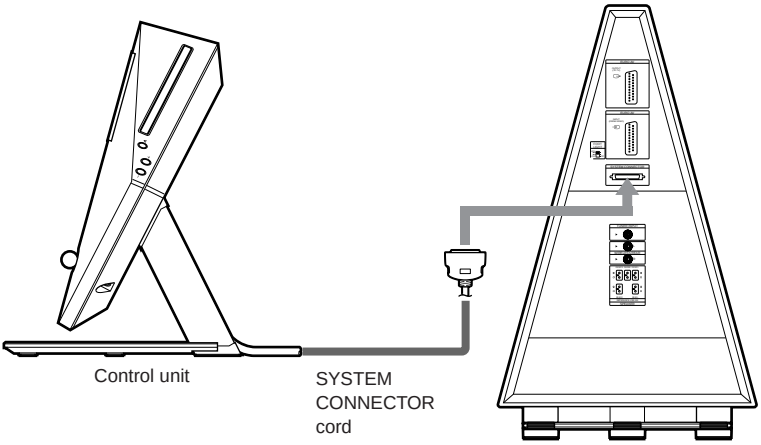
Press the RESET button on the upper rear side of the remote using a pointed object such as the tip of a mechanical pencil as shown below.



Step 1: Speaker System Hookup

Connecting the subwoofer

Connect the system connector of the control unit to the SYSTEM CONNECTOR jack of the subwoofer. When you insert the plug of the SYSTEM CONNECTOR cord, press and hold both ends of the plug.



continued

Setting up the wireless speakers (Wireless setting)

You do not need to connect the rear speakers to the system; audio signals are transmitted from the connected front speakers to the rear speakers. You cannot use any speakers other than those supplied with this system.

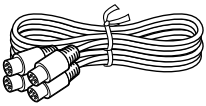
Note

When you use the speakers in the Wireless setting, make sure to set “CONNECT” to “WIRELESS” in “SPEAKER SETUP” (page 32).

Terminals for connecting the speakers

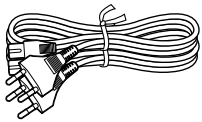
Connect the	To the	Using the
Front speakers	WIRELESS REAR L and R jacks	Wireless data output cords
	SPEAKER FRONT L (white) and R (red) jacks	Speaker cords
Center speaker	SPEAKER CENTER (green) jack	Speaker cord
Rear speakers	Mains	Mains leads

Wireless data output cord



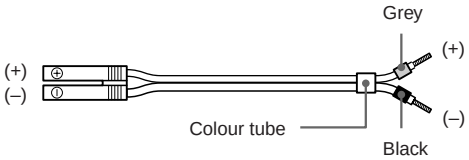
Mains lead

Connect the mains leads of the rear speakers to mains, after all connections are finished.



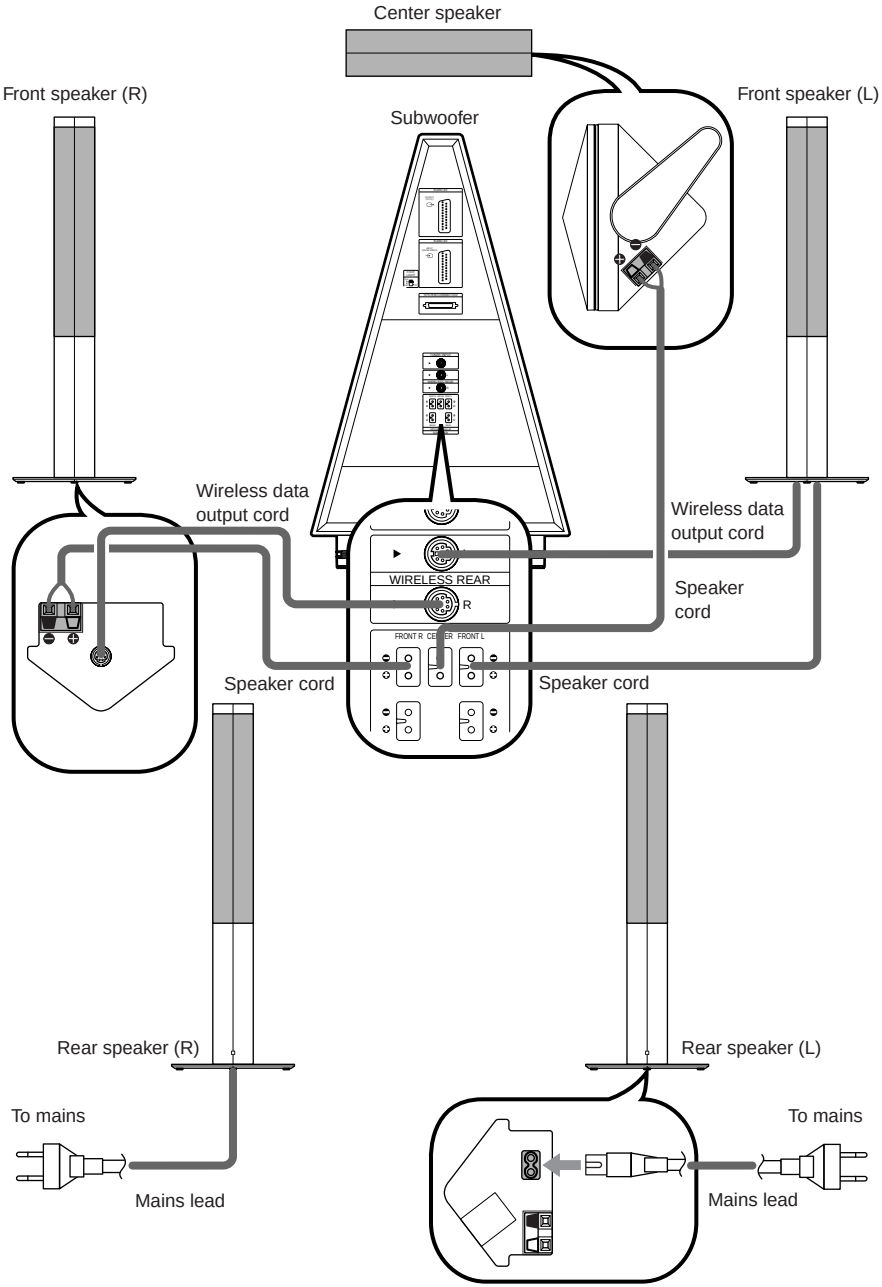
Speaker cord

The connector and the colour tube of the speaker cords are the same colour as the label of the jacks to be connected.



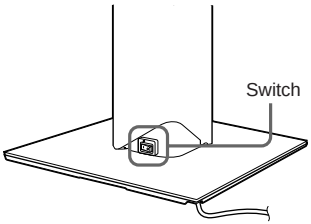
Connect the supplied speaker system to the subwoofer using the supplied speaker cords by matching the colours of the jacks to those of the cords. Do not connect any speakers other than those supplied with this system.

To obtain the best possible surround sound, specify the speaker parameters (distance, level, etc.) on page 29.


Center speaker
Front speaker (R)
Front speaker (L)
Subwoofer
Wireless data output cord
Wireless data output cord
WIRELESS REAR
R
Speaker cord
Speaker cord
Speaker cord
FRONT R CENTER FRONT L
Rear speaker (R)
Rear speaker (L)
To mains
To mains
Mains lead
Mains lead

continued

You can turn on/off the power of the rear speakers using the switch on the lower side panel of each rear speaker. The indicator on each rear speaker changes as follows: subwoofer power on/data received (green); subwoofer power on/no data (blinks green); subwoofer power off (red).

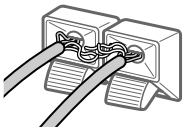


To avoid short-circuiting the speakers

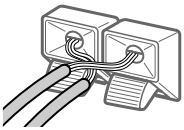
Short-circuiting of the speakers may damage the system. To prevent this, be sure to follow these precautions when connecting the speakers. Make sure the bare wire of each speaker cord does not touch another speaker jack or the bare wire of another speaker cord.

Examples of poor instllation of the speaker cords

Stripped speaker cord is touching another speaker terminal.



Stripped cords are touching each other due to excessive removal of insulation.



After connecting all the components, speakers, and the mains lead, output a test tone to check that all the speakers are connected correctly. For details on outputting a test tone, see page 33. If no sound is heard from a speaker while outputting a test tone, or a test tone is output from a speaker other than the one currently displayed in the front panel display, the speaker may be short-circuited. If this happens, check the speaker connection again.

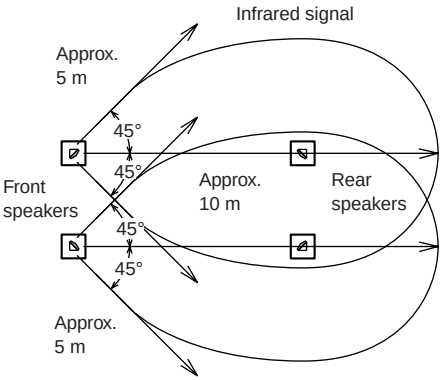
Note

Be sure to match the speaker cord to the appropriate terminal on the components: ⊕ to ⊕, and ⊖ to ⊖. If the cords are reversed, the sound will be distorted and will lack bass.

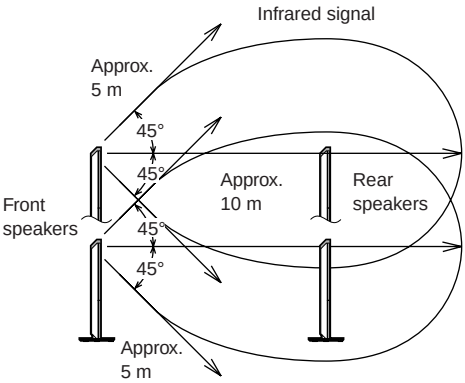
About the wireless rear speakers

This wireless rear speaker system adopts the Digital Infrared Audio Transmission system (page 78). The following diagram indicates the infrared transmission area (the range that the infrared rays can reach).

Top view



Side view



Notes

- When you use the rear speakers in wireless setting, do not install them in a place exposed to direct sunlight or strong light such as an incandescent lamp. Otherwise, the reaching range of the audio signal may be insufficient.
- If the room where you place the wireless rear speakers is too big or its ceiling is too high, such as in a big hall, make sure that there is no obstruction such as a person or object in the line of sight that links the top of the front speaker with that of the rear speaker. Otherwise, the sound from the rear speakers may be interrupted.
- Mixed signals may result if you use this wireless rear speaker system at the same time as other infrared transmission devices that use 3 MHz - 6 MHz waveband.

If you have to place the rear speakers in a place where the wireless setting is unusable, it is recommended to use the speakers in their wired setting (page 24).

continued

Connecting the rear speakers using the speaker cords (Wired setting)

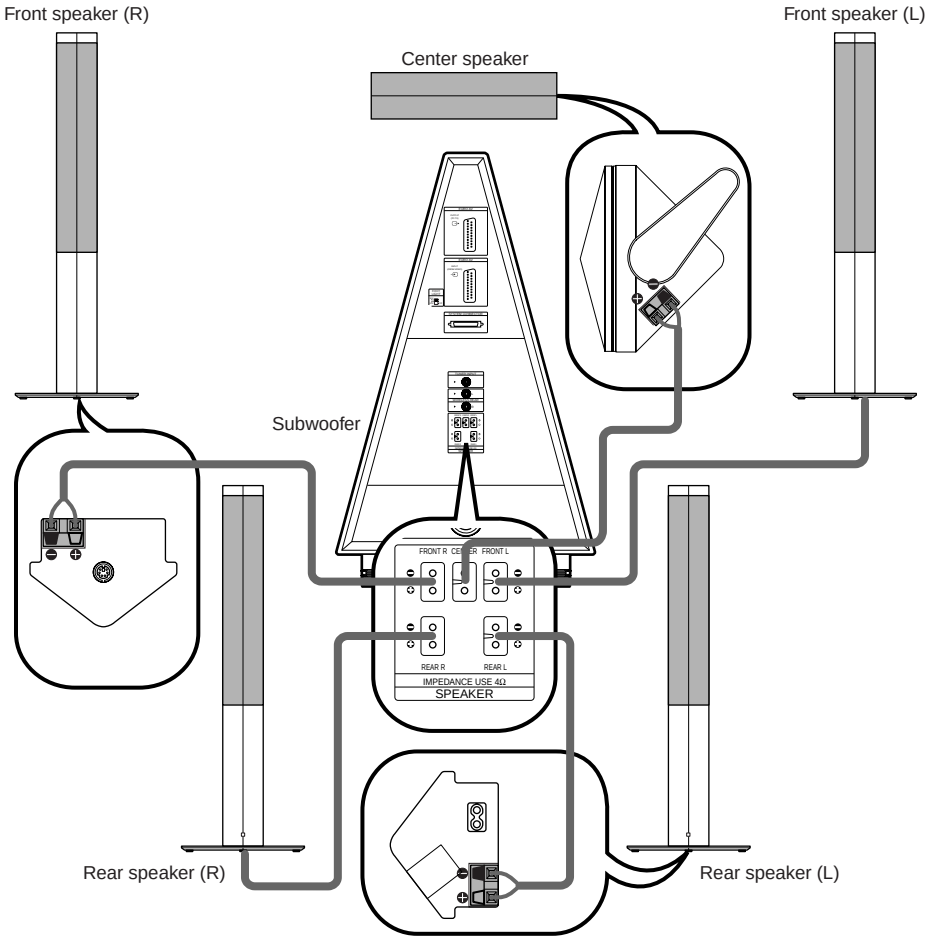
You can also connect the rear speakers using the speaker cord. In this case, you do not need to connect the wireless data output cords to the front speakers.

Notes

- When you use the speakers in Wired setting, make sure to set “CONNECT” to “WIRED” in “SPEAKER SETUP” (page 32).
- When you use the speakers in Wired setting, do not connect the mains leads to the rear speakers. If the power of the rear speakers is on, no sound is output from the rear speakers.

Terminals for connecting the speakers

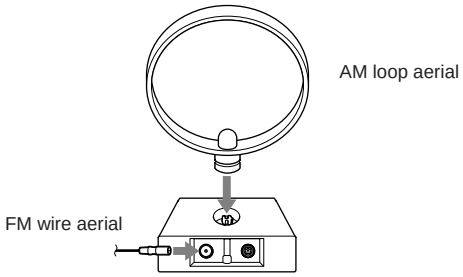
Connect the	To the
Front speakers	SPEAKER FRONT L (white) and R (red) jacks
Center speaker	SPEAKER CENTER (green) jack
Rear speakers	SPEAKER REAR L (blue) and R (grey) jacks



Step 2: Aerial Hookups

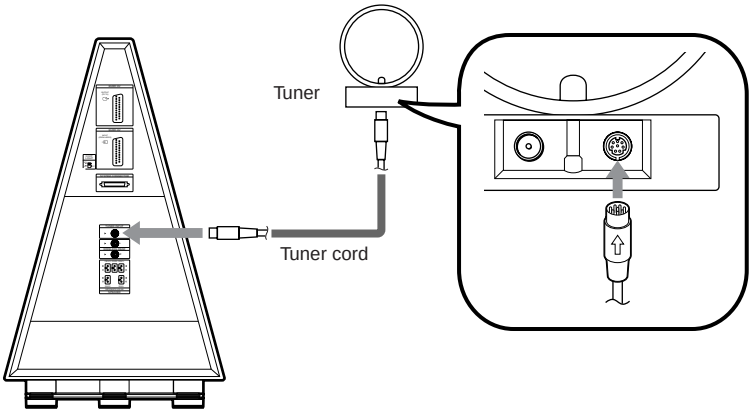
Joining the tuner

Attach the AM loop aerial and the FM wire aerial to the tuner box.



Connecting the tuner

Connect the tuner to the subwoofer using the supplied tuner cord.

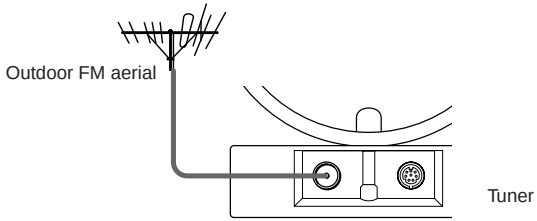


Notes

- To prevent noise pickup, keep the tuner away from the subwoofer and other components.
- Be sure to fully extend the FM wire aerial.
- After connecting the FM wire aerial, keep it as horizontal as possible.

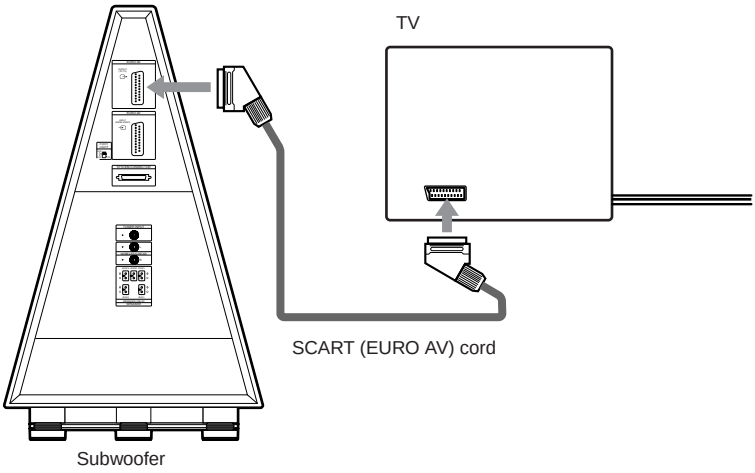
If you have poor FM reception

Use a 75-ohms coaxial cable (not supplied) to connect the system to an outdoor FM aerial as shown below.



Step 3: TV Hookup

Connect the system to your TV using the supplied SCART (EURO AV) cord. Be sure to connect the SCART (EURO AV) cord to the ⇨ EURO AV OUTPUT (TO TV) jack on the subwoofer.



Notes

- Make connections securely to prevent unwanted noise.
- Refer to the instructions supplied with the TV.
- The system cannot output component video signals.
- The system cannot output the audio signal of the connected TV. When you listen to the audio signal of the TV by using the connected speakers, input the audio signal of the TV from the ⇦ EURO AV INPUT (FROM VIDEO) jack.

When you connect using the SCART (EURO AV) cord, check that the TV conforms to VIDEO or RGB signals. If the TV conforms to VIDEO, change the input mode of the TV to RGB signals. Refer to the operating instructions supplied with the TV to be connected.

When connecting to a standard 4:3 screen TV

Depending on the disc, the image may not fit your TV screen.
If you want to change the aspect ratio, please refer to page 71.

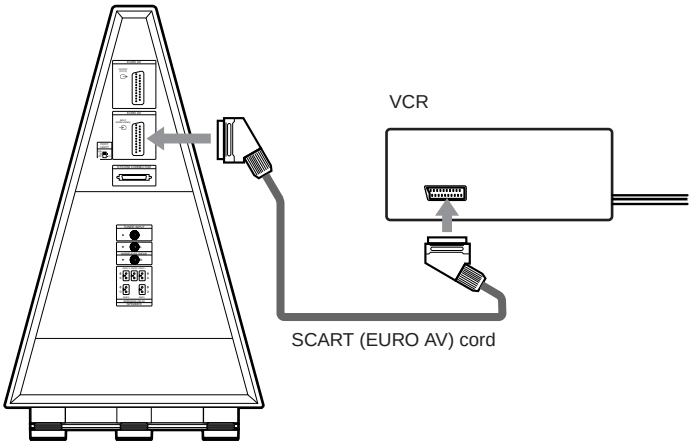
Step 4: Video Components Hookup

Note

Refer to the instructions supplied with the components to be connected.

Connecting a VCR to the system

Connect the SCART (EURO AV) cord to the EURO AV INPUT (FROM VIDEO) jack of the subwoofer. Be sure to make the connections securely to avoid hum and noise.



Notes

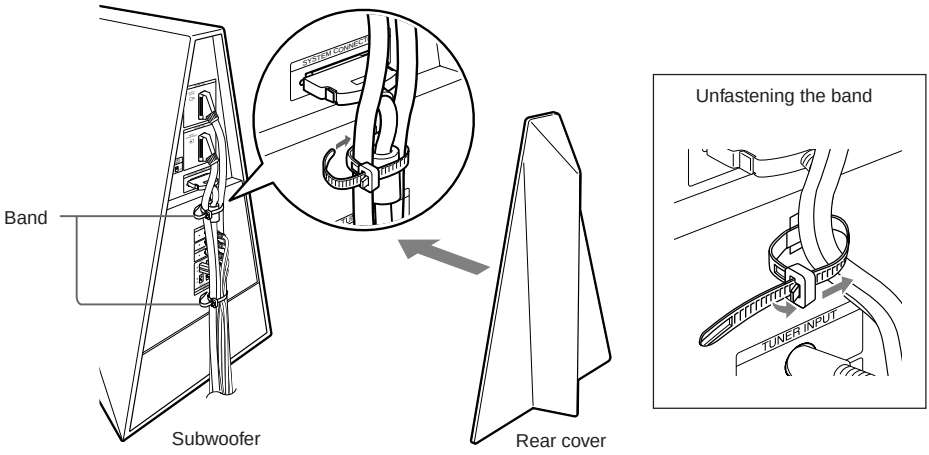
- Do not connect the system to a VCR. If you pass video signals from the system via a VCR, you may not receive a clear image on the TV screen.
- If you cannot view the picture from a VCR through this system which is connected to a TV with RGB component jacks, set to (Audio/Video) on your TV. If you select (RGB), the TV cannot receive the signal from the VCR.
- If you want to use your VCR's SmartLink function, connect the VCR to your TV's SmartLink jack.
- The SmartLink function may not work properly if your VCR is connected to your TV via the SCART (EURO AV) jacks on the subwoofer.
- If you connect the system to your TV via the SCART (EURO AV) jacks, the TV's input source synchronises with the system automatically when you start playback or press any button except for ⏻ on the subwoofer or ⏻ on the remote. In this case, select the COMMAND MODE DVD/TV switch to TV.
- The system does not output S video signals.
- When you select "DVD" by pressing FUNCTION (page 64), the video signal and RGB signal are not output from the EURO AV INPUT (FROM VIDEO) jack. Also, the system cannot output the component video signal.
- When you select "VIDEO" by pressing FUNCTION (page 64), the audio signal from the EURO AV INPUT (FROM VIDEO) jack is output to the connected speakers. The audio signal is not output from the EURO AV OUTPUT (TO TV) jack.

Step 5: Mains Hookup and Turn on the Power

After all connections are complete, connect the mains leads of the subwoofer and rear speakers to the mains, then connect the mains leads of your TV/Video components.

Before connecting the mains leads

Bundle the connected cords of the subwoofer and secure them with the bands, and then attach the rear cover of the subwoofer.
Pull the band with pulling the knob to the front, to unfasten the band.

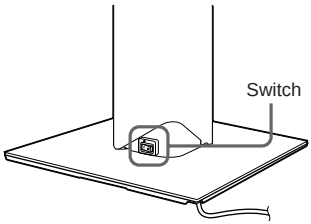


Note

Do not tie the cords too tightly.

Turning on the power

After connecting the mains lead to the mains, turn on the power of the subwoofer and the rear speakers (when using the rear speakers wirelessly).
The ⏻ (power) button is located on top of the subwoofer (page 13). When you press ⏻ on the subwoofer, the system goes to standby mode. Then, press ⏻ on the remote to turn the system on.
The power switch of each rear speaker is located on their lower side panels (page 22).



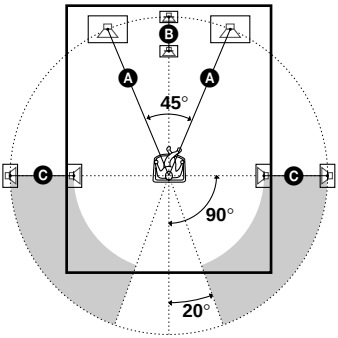
Speaker Setup

Positioning the speakers

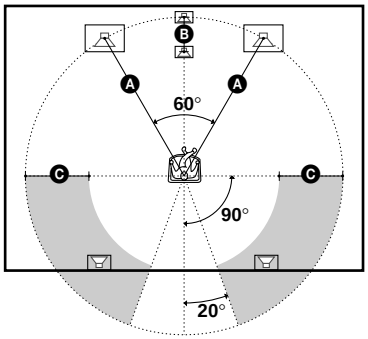
For the best possible surround sound, all the speakers other than the subwoofer should be the same distance from the listening position (A).
However, this system allows you to place the center speaker up to 1.6 metres closer (B) and the rear speakers up to 4.6 metres closer (C) to the listening position.
The front speakers can be placed from 1.0 to 15.0 metres (A) from the listening position.

You can place the rear speakers either behind you or to the side, depending on the shape of your room, etc. In wireless setting (page 20), place the speakers such that the left and right front speakers face their respective rear speakers.

When the rear speakers are placed to the side



When the rear speakers are placed behind you



Note

Do not place the center and rear speakers farther away from the listening position than the front speakers.

About magnetically shielded speaker (to prevent colour irregularity occurring on the TV screen)

The subwoofer in this system is magnetically shielded to prevent magnetic leakage. However, some leakage may occur, as a high-strength magnet is employed. If the subwoofer is used with a CRT-based TV or projector, install the subwoofer at least 0.3 metre from the TV set, etc. If it is installed too close, colour irregularity may occur on the screen.

If colour irregularity occurs…
Turn off the TV set once, then turn it on after 15 to 30 minutes.
If colour irregularity occurs again…
Place the subwoofer farther away from the TV set.
If colour irregularity still occurs after performing the above…
Make sure that no magnetic object is nearby the subwoofer. Colour irregularity may occur as a result of interaction between the subwoofer and the magnetic object.
Examples of possible sources of magnetic interference include: magnetic latches on a TV stand, etc., healthcare devices, toys, etc.

continued

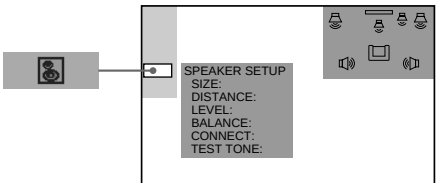
Note on placing speakers

Use caution when placing the subwoofer or front/rear speakers on a specially treated (waxed, oiled, polished, etc.) floor, as staining or discoloration may result.

Specifying the speaker parameters

To obtain the best possible surround sound, set the size of the speakers you have connected and their distance from your listening position. Then use the test tone to adjust the level and the balance of the speakers to the same level.

Select “SPEAKER SETUP” in the setup display. For details, see “Using the Setup Display” (page 69).
The default settings are underlined.



To return to the default setting

Select the item, then press CLEAR.

■SIZE

If you do not connect center or rear speakers, or move the rear speakers, set the parameters for CENTER and REAR. Since the front speaker and subwoofer settings are fixed, you cannot change them.

FRONT	YES
CENTER	YES: Normally select this. NONE: Select this if no center speaker is used.
REAR	BEHIND, SIDE: Specify the position and height to implement the Digital Cinema Surround modes. NONE: Select this if no rear speaker is used.
SUBWOOFER	YES

Notes

- When you select an item, the sound cuts off for a moment.
- Depending on the settings of other speakers, the subwoofer may output excessive sound.

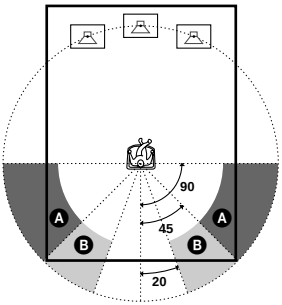
Specifying the rear speaker position

If you select anything other than “NONE” in “REAR,” specify the position of the rear speakers.

BEHIND	Select this if the rear speakers are located in section B.
SIDE	Select this if the rear speakers are located in section A.

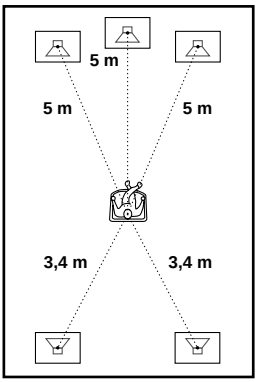
These parameters are not available when “REAR” is set to “NONE.”

Position diagram



■DISTANCE

The default distance setting for the speakers in relation to the listening position is shown below.



Be sure to change the value in the Setup Display when you move the speakers.

continued

FRONT 5 m	Front speaker distance from the listening position can be set in 0.2 metre increments from 1.0 to 15.0 metres.
CENTER 5 m	Center speaker distance can be moved up to 1.6 metres forward closer to the listening position, in 0.2 metre increments.
REAR 3.4 m	Rear speaker distance can be moved up to 4.6 metres closer to your listening position from the front speaker position, in 0.2 metre increments.

Notes

- When you select the item, the sound is momentarily interrupted.
- If each of the front or rear speakers are not placed at an equal distance from your listening position, set the distance according to the closest speaker.
- Do not place the rear speakers farther away from your listening position than the front speakers.
- The DISTANCE setting is available except for Super Audio CD.

■LEVEL

You can vary the level of each speaker as follows. Be sure to set “TEST TONE” to “ON” for easy adjustment.

CENTER 0 dB	Adjusts the level of the center speaker (–6 dB to +6 dB, 1 dB increments).
REAR 0 dB	Adjusts the level of the rear speakers (–6 dB to +6 dB, 1 dB increments).
SUBWOOFER 0 dB	Adjusts the level of the subwoofer (–6 dB to +6 dB, 1 dB increments).

■BALANCE

You can vary the balance of the left and right speakers as follows. Be sure to set “TEST TONE” to “ON” for easy adjustment.

FRONT (CENTER)	Adjusts the balance between the front left and right speakers (You can adjust from the center 6 steps left or right).
REAR (CENTER)	Adjusts the balance between the rear left and right speakers (You can adjust from the center 6 steps left or right).

To adjust the volume of all the speakers at one time

Press VOLUME –/+ on the control unit or VOL +/– on the remote.

■CONNECT

Select the method for connecting the rear speakers.

REAR WIRELESS	Select this when you use the rear speakers in wireless setting (page 20).
REAR WIRED	Select this when you use the rear speakers in wired setting (page24).

■TEST TONE

The speakers will emit a test tone to adjust “BALANCE” and “LEVEL.”

OFF	The test tone is not emitted from the speakers.
ON	The test tone is emitted from each speaker in sequence. When “BALANCE” is selected, the test tone is emitted from both left and right speakers simultaneously. When “LEVEL” is selected, the test tone is emitted from only the speaker that you are adjusting.

Adjusting the speaker volume and level

1 After you stop playback, select “SPEAKER SETUP” after pressing DVD SETUP in the Setup Display.

2 Select “TEST TONE” and set to “ON.”

You will hear the test tone from each speaker in sequence.

3 From your listening position, select “BALANCE” or “LEVEL” and adjust the value of “BALANCE” and “LEVEL” using ↑/↓.

The test tone is emitted from both left and right speakers simultaneously.

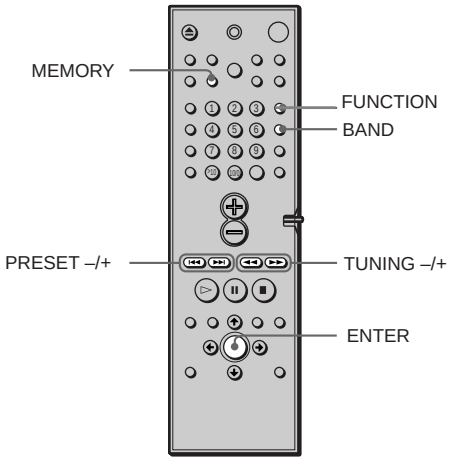
4 Select “TEST TONE” and set to “OFF” to turn off the test tone.

Note

When you adjust the speaker settings, the sound cuts off for a moment.

Presetting Radio Stations

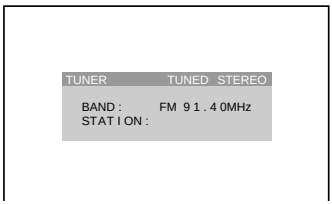
You can preset 20 stations for FM and 10 stations for AM on the TV screen.
Before tuning, make sure to turn down the volume to minimum.



1 **Press FUNCTION repeatedly until "TUNER" appears in the front panel display.**
The TUNER information appears on the TV screen.

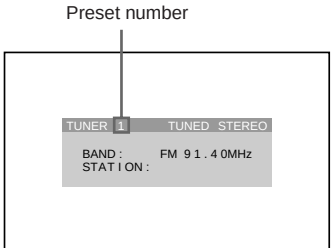
2 **Press BAND repeatedly until the band you want appears.**
Every time you press BAND, the band changes to AM or FM alternately.

3 **Press and hold TUNING + or – until the frequency indication starts to change, then release.**
Scanning stops when the system tunes in a station. "TUNED" and "STEREO" (for stereo programme) appear.

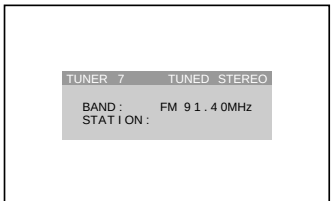


4 **Press MEMORY.**

A preset number flashes.



5 **Press PRESET + or – to select the preset number you want.**



6 **Press ENTER.**

"COMPLETE" appears and the station is stored.

7 **Repeat Step 2 to 6 to store other stations.**

To tune in a station with a weak signal

Press TUNING + or – repeatedly in Step 3 to tune in the station manually.

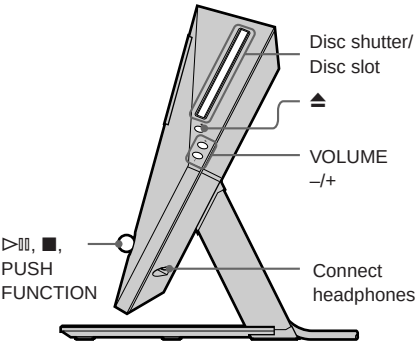
To change the preset number

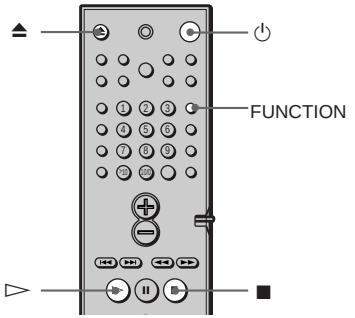
Start over from Step 1.

Playing Discs

DVD VIDEO CD SA-CD CD MP3

Depending on the DVD or VIDEO CD, some operations may be different or restricted. Refer to the operating instructions supplied with your disc.





1 **Turn on your TV.**

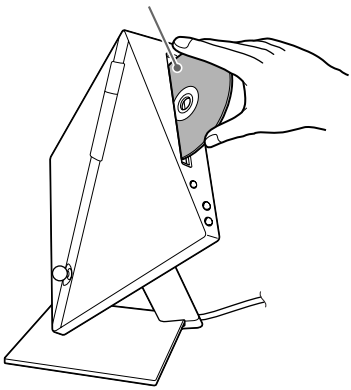
2 **Set the input selector on the TV to this system.**

3 **Press ⏻ on the top panel of the subwoofer, and then ⏻ on the remote.**

The system turns on.
Unless the mode of the system is set to "DVD," press FUNCTION (or press the control button on the control unit) to select "DVD."
Disc shutter automatically opens.

4 **Load a disc after "OPEN" appears in the front panel display.**

Push the disc into the disc slot until the disc is retracted automatically.
With the labelled side facing to the front



5 **Press ⊳ (or push up the control button to ⊳II on the control unit).**

The system starts playback (continuous play). Adjust the volume by pressing VOLUME –/+ on the control unit.

After following Step 5

Depending on the disc, a menu may appear on the TV screen. You can play the disc interactively by following the instructions on the menu. DVD (page 39), VIDEO CD (page 40).

About the disc shutter

The disc shutter automatically opens when you select "DVD" as the function.
If the system mode is set to anything except "DVD," or when the system is in standby mode, the disc shutter closes. The disc shutter also automatically closes if no button is pressed on either the control unit or remote for about a minute. Note that the disc shutter does not close if a disc is inserted in the disc slot, or if the setup display is shown. When the disc shutter is closed, press ⏏ to open the disc shutter.

To remove the disc

Press ⏏. Remove the disc after it is ejected from the system.
"OPEN" appears in the front panel display.

To turn on the system

Press ⏻ on the subwoofer. The system enters standby mode and the ⏻ (on/standby) indicator on the subwoofer lights up in red (the control unit's control button indicator also lights up in red). Press ⏻ on the remote to turn on the system (the ⏻ (on/standby) indicator on the subwoofer lights up in green, the control unit's control button indicator goes off, and the front panel display lights up).
In standby mode, the system also turns on by pressing ⏏ or pushing up the control button to ⏵⏸ on the control unit, or by pressing ⏵ on the remote.

To turn off the system

Press ⏻ on the remote. The system enters standby mode and the ⏻ (on/standby) indicator on the subwoofer lights up in red (the control unit's control button indiactor also lights up in red). To turn off the system completely, press ⏻ on the subwoofer. Do not press ⏻ on the subwoofer to turn it off while the disc shutter is open. While playing a disc, do not turn off the system by pressing ⏻. Doing so may cancel the menu settings. When you turn off the system, first press ■ (or push down the control button to ■ on the control unit) to stop playback and then press ⏻ on the remote.

Saving the power in standby mode

Press ⏻ on the remote once.

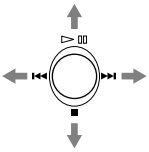
While the system is in standby mode, the ⏻ (on/standby) indicator on the subwoofer lights up in red (the control unit's control button indiactor also lights up in red).

To cancel standby mode

Press ⏻ on the remote once.

Using the control button

You can also operate the system by pushing up/down/right/left or press the control button on the control unit.

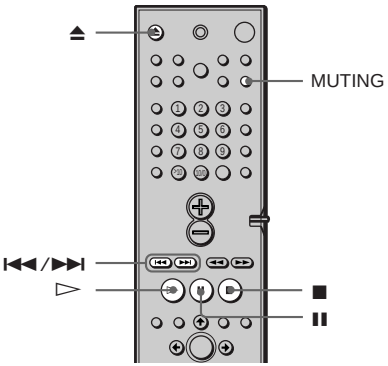


Direction	Function
↑	DVD: ⏵⏸ Play/Pause*
↓	DVD: ■ Stop
	Tuner: Change the band
→	DVD: ⏭ Go to the next chapter, track, or scene/⏩ Fast forward (when you push right and hold)
	Tuner: Preset +
←	DVD: ⏮ Go back to the preceding chapter, track, or scene/⏪ Fast reverse (when you push left and hold)
	Tuner: Preset –
Press	Change the function

* When you push up the control button, the function automatically changes to DVD mode. Each time you push up the button, the function alternates between play and pause mode.
You cannot use the SELECT function during the playback of a VIDEO CD with PBC functions by pushing up the control button (page 40).

continued

Additional operations



To	Operation
Stop	Press ■.
Pause	Press II.
Resume play after pause	Press II or ▷.
Go to the next chapter, track, or scene in continuous play mode	Press ►►I.
Go back to the preceding chapter, track, or scene in continuous play mode	Press I◄◄.
Stop play and remove the disc	Press ⏏.
Mute the sound	Press MUTING. To cancel muting, press it again or turn up the volume (or press VOLUME + on the control unit).

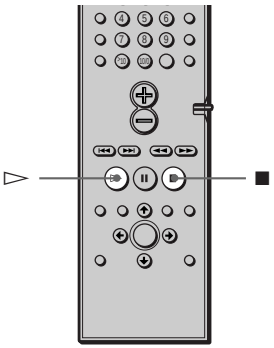
Note

If DVD playback is paused for approximately one hour, the system automatically turns off.

Resuming Playback from the Point Where You Stopped the Disc (Resume Play)

DVD VIDEO CD SA-CD CD MP3

When you stop the disc, the system remembers the point where you pressed ■. As long as you do not remove the disc, Resume Play will work even if the system enters standby mode by pressing ⏻.



1 **While playing a disc, press ■ to stop playback.**

You can restart the disc from the point where you stopped the disc.
If you cannot restart from that point, Resume Play is not available.

2 **Press ▷.**

The system starts playback from the point where you stopped the disc in Step 1.

To play from the beginning of the disc, press ■ twice, then press ▷.

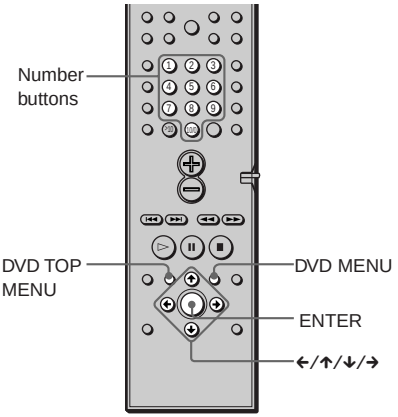
Notes

- Depending on where you stopped the disc, the system may not resume playback from exactly the same point.
- The point where you stopped playing is cleared when:
  – you turn the power off by pressing ⏻ on the subwoofer.
  – you change the play mode.
  – you change the setting on the Setup Menu.

Using the DVD's Menu

DVD

A DVD is divided into long sections of a picture or a music feature called "titles." When you play a DVD which contains several titles, you can select the title you want using DVD TOP MENU.
When you play DVDs that allow you to select items such as the language for the subtitles and the language for the sound, select these items using DVD MENU.



1 **Press DVD TOP MENU or DVD MENU.**

The disc's menu appears on the TV screen.
The contents of the menu vary from disc to disc.

2 **Press ←/↑/↓/→ or the number buttons to select the item you want to play or change.**

3 **Press ENTER.**

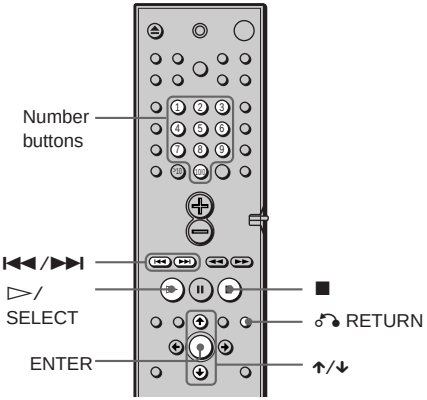
Note

If the DVD top menu or a DVD menu is displayed during DVD playback for approximately one hour, the system automatically turns off.

Playing VIDEO CDs with PBC Functions (PBC Playback)

VIDEO CD

With PBC (Playback Control) functions, you can enjoy simple interactive operations, search functions, and other such operations. PBC playback allows you to play VIDEO CDs interactively by following the menu on the TV screen.



1 **Start playing a VIDEO CD with PBC functions.**
The menu for your selection appears.

2 **Select the item number you want by pressing ↑/↓ or the number buttons.**

3 **Press ENTER.**

4 **Follow the instructions in the menu for interactive operations.**
Refer to the instructions supplied with the disc, as the operating procedure may differ according to the VIDEO CD.

To go back to the menu

Press RETURN.

To play without using PBC, press ⏮/⏭ or the number buttons while the system is stopped to select a track, then press ▷ or ENTER.
"Play without PBC" appears on the TV screen and the system starts continuous play. You cannot play still pictures such as a menu. To return to PBC playback, press ■ twice, then press ▷.

Note

Depending on the VIDEO CD, "Press ENTER" in Step 3 may appear as "Press SELECT" in the instructions supplied with the disc. In this case, press ▷ on the remote.

Playing an MP3 Audio Track

MP3

You can play back data CDs (CD-ROMs/CD-Rs/CD-RWs) recorded in MP3 (MPEG1 Audio Layer 3) format.

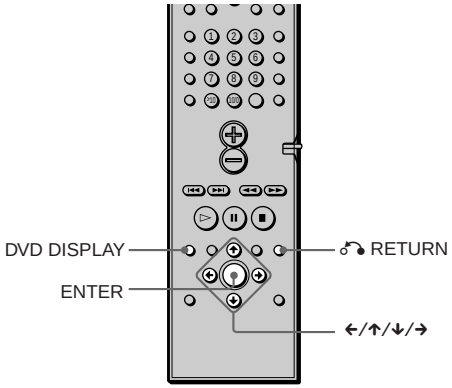
1 **Load a data disc recorded in MP3 into the system.**

2 **Press ▷.**
The system starts to play the first MP3 audio track in the first album on the disc.

Note

The only formats compatible with this system are MPEG 1 Layer 3 and MPEG 2 Layer 3.

Selecting an album and track

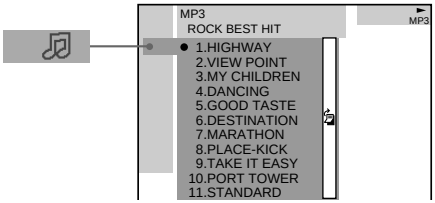


1 **Press DVD DISPLAY.**
The Control Menu and disc name of MP3 data disc appear.

2 **Press ↑/↓ to select (ALBUM) then press ENTER or →.**
The list of albums contained in the disc appears.

3 **Select an album you want to play using ↑/↓ and press ENTER.**

4 **Select (TRACK) using ↑/↓ and press ENTER.**
The list of tracks contained in the current album appears.



When the list of all tracks or albums cannot be displayed on the window, the jump bar appears. Press → to select the jump bar icon, and then scroll the jump bar to display the rest of the list using ↑/↓. Press ← or RETURN to return to the track or the album list.

5 **Select a track using ↑/↓ and press ENTER.**
The Selected track starts playing.

To return to the previous display

Press RETURN or ←.

To turn off the display

Press DVD DISPLAY.

continued

Notes

- Only the letters in the alphabet and numbers can be used for album or track names. Anything else is displayed as " ".
- If the MP3 file you play back has an ID3 tag, the ID3 tag information is displayed as a track name.

About MP3 audio tracks

You can play MP3 audio tracks on CD-ROMs, CD-Rs, or CD-RWs. However, the discs must be recorded according to ISO9660 level 1, level 2, or Joliet format for the system to recognize the tracks. You can also play discs recorded in Multi Session. See the instructions of the CD-R/RW device or recording software (not supplied) for details on the recording format.

To play a Multi Session CD

This system can play Multi Session CDs when an MP3 audio track is located in the first session. Any subsequent MP3 audio tracks, recorded in the later sessions, can also be played back.
When audio tracks and images in music CD format or video CD format are recorded in the first session, only the first session will be played back.

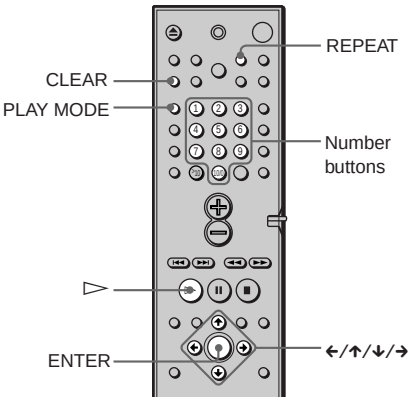
Notes

- If you put the extension ".MP3" to data not in MP3 format, the system cannot recognize the data properly and will generate a loud noise which could damage your speaker system.
- The system cannot play audio tracks in MP3PRO format.

Creating Your Own Programme (Programme Play)

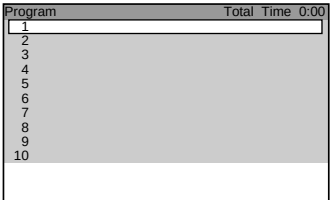
VIDEO CD SA-CD CD MP3

You can play the contents of a disc in the order you want by arranging the order of the tracks on the disc to create your own programme. You can programme up to 25 tracks.



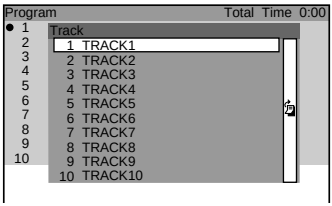
1 In stop mode, press PLAY MODE repeatedly until "PROGRAM" appears in the front panel display.

The programme menu appears on the TV screen.



2 Press →.

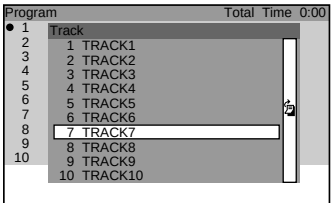
The cursor moves to the track (in this case, “1”). Before programming the MP3 tracks, it is required to select the album.



When the list of all tracks cannot be displayed on the window, the jump bar appears. Press → to select the jump bar icon, and then scroll the jump bar to display the rest of the list using ↑/↓. Press ← or RETURN to return to the track list.

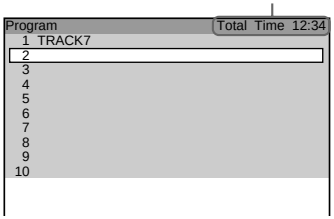
3 Select the track you want to programme.

For example, select track “7.”



4 Press ↑/↓ or the number buttons to select “7” then press ENTER.

Total time of the programmed tracks (except MP3)



5 To programme other tracks, repeat Steps 2 to 4.

The programmed tracks are displayed in the selected order.

6 Press ▷ to start Programme Play.

Programme Play begins.
When the programme ends, you can restart the same programme again by pressing ▷.

To return to normal play

Press CLEAR during playback.

To turn off the programme menu

In stop mode, press PLAY MODE to turn off the programme menu.

To cancel the programmed order

Press CLEAR in Step 5, and the last programme is cancelled one by one.

You can do Repeat Play of the programmed tracks. Press REPEAT, or set “REPEAT” to “ALL” in the Control Menu display during Programme Play.

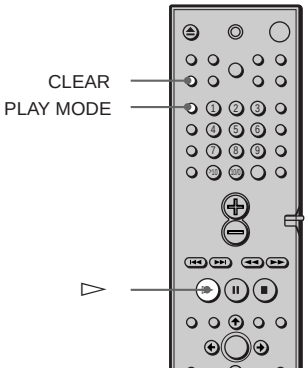
Notes

- This Programme Play function is not available for DVDs.
- When you programme MP3 tracks, “--:--” is displayed as the total time of the programmed tracks.

Playing in Random Order

(Shuffle Play) VIDEO CD SA-CD CD MP3

You can have the system “shuffle” tracks and play them in random order. Subsequent “shuffling” may produce a different playing order.



1 **In stop mode, press PLAY MODE repeatedly until “SHUFFLE” appears in the front panel display.**
When you play an MP3 disc, you can play all tracks in albums in a random order.

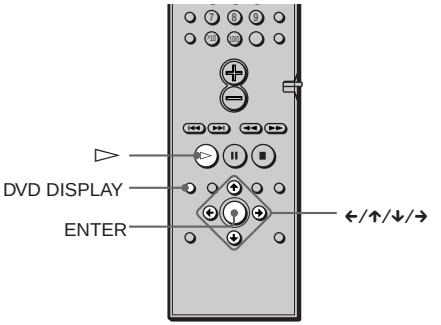
2 **Press ▷.**

To return to normal play

During playback, press CLEAR to return to normal play.

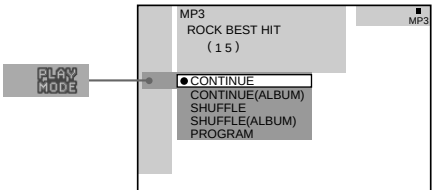
Setting the shuffle mode on the Control Menu

You can select the normal shuffle and album shuffle (MP3 only).



1 **Press DVD DISPLAY.**
The Control Menu appears.

2 **Press ↑/↓ to select PLAY MODE (PLAY MODE), then press ENTER or →.**



3 **Select SHUFFLE or SHUFFLE (ALBUM) using ↑/↓ and press ENTER.**

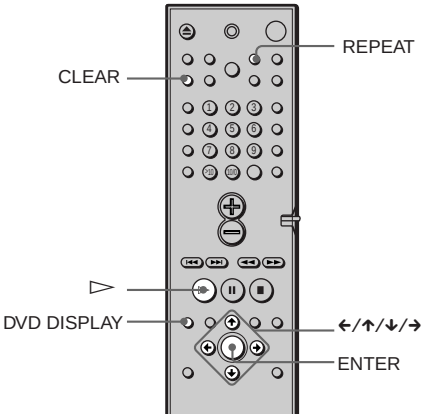
4 **Press ▷.**
The selected Shuffle Play begins.

Note

Shuffle Play is cancelled when:
– you turn the power off.
– you eject the disc. (The playmode changes in the following sequence.)
• SHUFFLE → CONTINUE
• SHUFFLE (ALBUM) → CONTINUE (ALBUM)
– you select CONTINUE in Step 3.

Playing Repeatedly (Repeat Play) DVD VIDEO CD SA-CD CD MP3

You can play all the titles/tracks or a single title/chapter/track on a disc.
In Shuffle or Programme Play mode, the system repeats tracks in the shuffled or programmed order (except for DVD).
You cannot perform Repeat Play during PBC playback of VIDEO CDs (page 40).
Depending on the DVD disc, Repeat Play may not be functional.

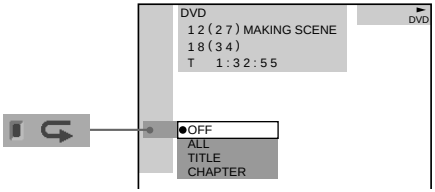


1 Press DVD DISPLAY.

The Control Menu appears.

2 Press ↑/↓ to select (REPEAT), then press ENTER.

If you do not select "OFF," the indicator of the "REPEAT" lights in green.



3 Select the Repeat Play setting, then press ENTER.

When playing a DVD

- OFF: does not play repeatedly.
- ALL: repeats all the titles.
- TITLE: repeats the current title on a disc.
- CHAPTER: repeats the current chapter.

When playing a VIDEO CD/Super Audio CD/CD/MP3 and when Programme Play is set to OFF

- OFF: does not play repeatedly.
- ALL: repeats all the tracks on the disc, or repeats the current album (MP3 only).
- TRACK: repeats the current track.

When Programme Play is set to ON

- OFF: does not play repeatedly.
- ALL: repeats Programme Play.

To cancel Repeat Play

Press CLEAR.

You can set Repeat Play during stop mode

After selecting the "REPEAT" item, press ▷.
The system starts Repeat Play.

You can quickly display the "REPEAT" status

Press REPEAT on the remote.

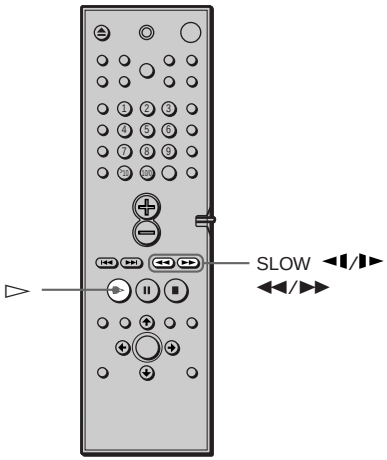
Notes

- Repeat Play is cancelled when:
  – you eject the disc.
  – you turn the power off.
- You can perform Repeat Play for DVD titles that contain chapters.

Searching for a Particular Point on a Disc (Scan, Slow-motion Play)

DVD VIDEO CD SA-CD CD

You can locate a particular point on a disc quickly by monitoring the picture or playing back slowly.



Notes

- Depending on the DVD/VIDEO CD, you may not be able to do some of the operations described.
- This function does not work when you play an MP3 disc.

Locating a point quickly by playing a disc in fast forward or fast reverse (Scan)

Press ◄◄ or ►► while playing a disc. When you find the point you want, press ▷ to return to normal speed.

To change the scan speed (DVD/VIDEO CD/Super Audio CD only)

Each time you press ◄◄ or ►► during scan, the playback speed changes. Two speeds are available. With each press, the indication changes as follows:

Playback direction

FF1►► → FF2►►

Opposite direction

FR1◄◄ → FR2◄◄

FF2►►/FR2◄◄ playback speed is faster than FF1►►/FR1◄◄.

Watching frame by frame (Slow-motion play) DVD VIDEO CD

You can use this function only for DVDs or VIDEO CDs. Press ◄❚ or ❚► when the system is in the pause mode. To return to normal speed, press ▷.
Each time you press ◄❚ or ❚► during Slow-motion play, the playback speed changes. Two speeds are available. With each press, the indication changes as follows:

Playback direction

SLOW 2❚► → SLOW 1❚►

Opposite direction (DVD only)

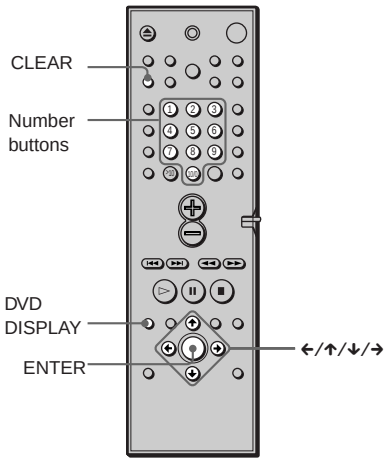
SLOW 2◄❚ → SLOW 1◄❚

SLOW 2❚►/SLOW 2◄❚ playback speed is slower than SLOW 1❚►/SLOW 1◄❚.

Searching for a Title/ Chapter/Track/Index/ Album

DVD VIDEO CD SA-CD CD MP3

You can search a title (DVD), chapter (DVD), track (CD, VIDEO CD, Super Audio CD, MP3), index (VIDEO CD, Super Audio CD), and album (MP3). As titles, tracks and albums are assigned unique names on the disc, you can select the desired one from the Control Menu. Also chapters and indexes are assigned unique numbers on the disc, so you select the desired one by entering its number. Or you can search a particular point using the time code. (TIME SEARCH)



Searching for a title/track/album

1 **Press DVD DISPLAY.**
The Control Menu appears.

2 **Press ↑/↓ to select the search method, then press ENTER.**

■When playing a DVD
(TITLE)

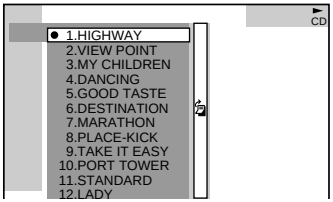
■When playing a VIDEO CD
(TRACK)

■When playing a Super Audio CD
(TRACK)

■When playing a CD
(TRACK)

■When playing an MP3
(ALBUM) or (TRACK)

Example: when you select (TRACK)
The list of tracks contained in the disc appears.



When the list of all tracks or albums cannot be displayed on the window, the jump bar appears. Press → to select the jump bar icon, and then scroll the jump bar to display the rest of the list using ↑/↓. Press ← or RETURN to return to the track or the album list.

3 **Press ↑/↓ to select the desired track, then press ENTER.**
The system starts playback from the selected track.

continued

Searching for a chapter/index

1 **Press DVD DISPLAY.**
The Control Menu appears.

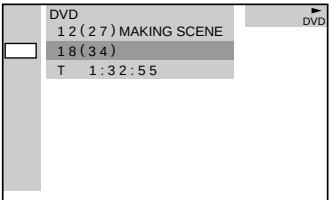
2 **Press ↑/↓ to select the search method.**

■When playing a DVD
(CHAPTER)

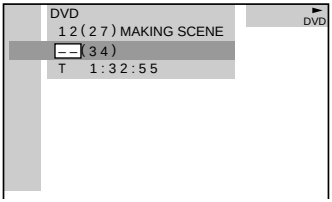
■When playing a VIDEO CD
(INDEX)

■When playing a Super Audio CD
(INDEX)

Example: when you select (CHAPTER)
"** (**)" is selected (** refers to a number).
The number in parentheses indicates the total number of titles, chapters, tracks, or indexes.



3 **Press ENTER.**
"** (**)" changes to "-- (**)."



4 **Press ↑/↓ or the number buttons to select the chapter or index number you want to search.**

If you make a mistake
Cancel the number by pressing CLEAR, then select another number.

5 **Press ENTER.**
The system starts playback from the selected number.

To turn off the Control Menu

Press DVD DISPLAY repeatedly until the Control Menu is turned off.

To search for a particular point using the time code (TIME SEARCH)

1 **In Step 2, select (TIME).**
"T **:**:**" (playing time of the current title or track) is selected.

2 **Press ENTER.**
"T **:**:**" changes to "T --:--:--."

3 **Input the time code using the number buttons, then press ENTER.**
For example, to find the desired point at 2 hours, 10 minutes, and 20 seconds after the beginning, just enter "2:10:20."

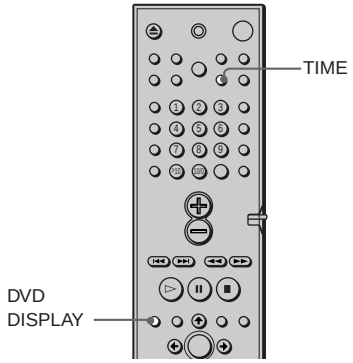
Notes

- The title, chapter or track number displayed is the same number recorded on the disc.
- You cannot search a scene of a VIDEO CD.

Checking the Playing Time and Remaining Time

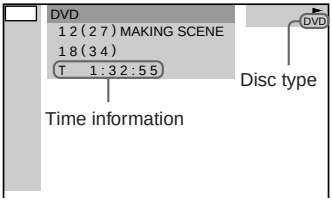
DVD VIDEO CD SA-CD CD MP3

You can check the playing time and remaining time of the current title, chapter, or track, and the total playing time or remaining time of the disc.



1 Press DVD DISPLAY during playback.

The Control Menu appears.



2 Press TIME repeatedly to change the time information.

The display and the kinds of time that you can change depend on the disc you are playing.

■When playing a DVD

- T **:**:**
  Playing time of the current title
- T–**:**:**
  Remaining time of the current title
- C **:**:**
  Playing time of the current chapter
- C–**:**:**
  Remaining time of the current chapter

■When playing a VIDEO CD (with PBC functions)

- **:**
  Playing time of the current scene

■When playing a VIDEO CD (without PBC functions), Super Audio CD or CD

- T **:**
  Playing time of the current track
- T–**:**
  Remaining time of the current track
- D **:**
  Playing time of the current disc
- D–**:**
  Remaining time of the current disc

■When playing an MP3

- T **:**
  Playing time of the current track
- T–**:**
  Remaining time of the current track

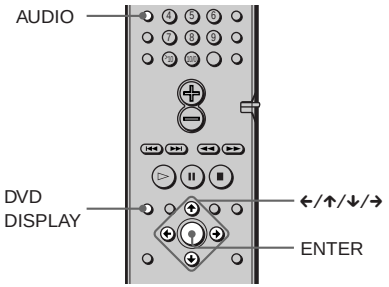
To turn off the Control Menu

Press DVD DISPLAY repeatedly until the Control Menu is turned off.

Changing the Sound

DVD VIDEO CD SA-CD CD

If a DVD is recorded with multilingual tracks, you can select the language you want while playing the DVD.
If the DVD is recorded in multiple audio formats (PCM, Dolby Digital, MPEG audio, or DTS), you can select the audio format you want while playing the DVD.
With stereo CDs or VIDEO CDs, you can select the sound from the right or left channel and listen to the sound of the selected channel through both the right and left speakers. (In this case, the sound loses its stereo effect.)
For example, when playing a disc containing a song with the vocals on the right channel and the instruments on the left channel, you can select the left channel and hear only the instruments from both speakers.

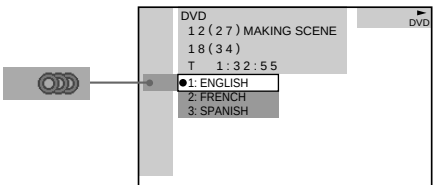


1 Press DVD DISPLAY during playback.

The Control Menu is displayed.

2 Press ↑/↓ to select (AUDIO), then press ENTER.

The options for AUDIO appear.



3 Press ↑/↓ to select the desired audio signal.

■When playing a DVD

Depending on the DVD, the choice of language varies.
When 4 digits are displayed, they represent the language code. Refer to the language code list on page 83 to see which language the code represents. When the same language is displayed two or more times, the DVD is recorded in multiple audio formats.

■When playing a VIDEO CD, or CD

The default setting is underlined.

- STEREO: The standard stereo sound
- 1/L: The sound of the left channel (monaural)
- 2/R: The sound of the right channel (monaural)

■When playing a Super Audio CD

In stop mode, depending on the Super Audio CD, the choice of settings varies.

- MULTI: The disc has multi-channel playback area
- 2CH: The disc has 2 channel playback area.
- CD: When you want to play the disc as a conventional CD.

Note

Not all discs give you the three choices above when in Super Audio CD playback. It all depends on the layer configuration of the Super Audio CD to be played.

4 Press ENTER.

To turn off the Control Menu

Press DVD DISPLAY repeatedly until the Control Menu is turned off.

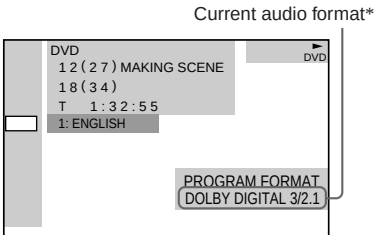
You can select AUDIO directly by pressing AUDIO. Each time you press the button, the item changes.

Notes

- For discs not in multiple audio format, you cannot change the sound.
- During DVD playback, the sound may change automatically.

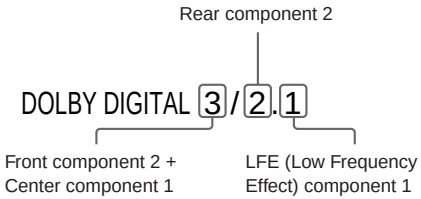
Displaying the audio information of the disc DVD

When you select “AUDIO,” the channels being played are displayed on the screen. For example, in Dolby Digital format, multiple signals ranging from monaural to 5.1 channel signals can be recorded on a DVD. Depending on the DVD, the number of recorded channels may differ.



* “PCM,” “MPEG,” “DTS,” or “DOLBY DIGITAL” is displayed.
For “DOLBY DIGITAL,” the channels in the playing track are displayed numerically as follows:

For Dolby Digital 5.1 ch:



The display examples are as follows:

• PCM (stereo)

PROGRAM FORMAT
PCM 48kHz 24bit

• Dolby Surround

PROGRAM FORMAT
DOLBY DIGITAL 2/0
DOLBY SURROUND

• Dolby Digital 5.1ch

PROGRAM FORMAT
DOLBY DIGITAL 3/2.1

• DTS

PROGRAM FORMAT
DTS 3/2.1

Notes

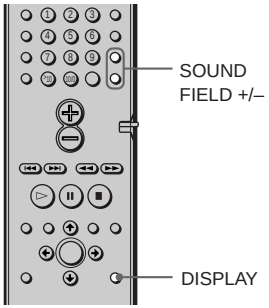
- When the signal contains rear signal components such as LS, RS, or S, the surround effect is enhanced.
- If you play MPEG AUDIO sound tracks, the system outputs PCM (stereo) signals.

Automatically Decoding the Input Audio Signal

(Auto Decoding)

DVD VIDEO CD SA-CD CD MP3

The auto decoding function automatically detects the type of audio signal being input (Dolby Digital, DTS, or standard 2 channel stereo) and performs the proper decoding if necessary. This mode presents the sound as it was recorded/encoded, without adding any effects (e.g. reverberation).
However, if there are no low frequency signals (Dolby Digital LFE, etc.), it will generate a low frequency signal for output to the subwoofer.



Press SOUND FIELD +/– on the remote repeatedly until "S.F 1" appears in the front panel display.

If the system mode is set to anything except "VIDEO," each time you press SOUND FIELD +/–, the sound field name momentarily appears on the TV screen.
The auto format decode function is activated.

To check the sound field

Press DISPLAY.
The sound field appears on the TV screen, and the sound field number appears in the front panel display. The sound field on the TV screen turns off in a few seconds.
If the system mode is set to "VIDEO," the TV screen momentarily changes.

Enjoying Surround Sound

DVD VIDEO CD CD MP3

You can take advantage of surround sound simply by selecting one of the system's pre-programmed sound fields. They bring the exciting and powerful sound of movie theatres and concert halls into your home.
To select the sound field, press SOUND FIELD +/– on the remote repeatedly until the number for the sound field you want appears in the front panel display.
If the system mode is set to anything except "VIDEO," each time you press SOUND FIELD +/–, the sound field name momentarily appears on the TV screen.

Number	Sound field
1	AUTO DECODING
2	NORMAL SURROUND
3	CINEMA STUDIO EX A*
4	CINEMA STUDIO EX B*
5	CINEMA STUDIO EX C *
6	DIGITAL CONCERT HALL A
7	DIGITAL CONCERT HALL B
8	JAZZ CLUB
9	LIVE CONCERT
10	GAME
11	2CHANNEL STEREO
12	HEADPHONE THEATER
13	HEADPHONE 2CH

* Use DCS Technology

About DCS (Digital Cinema Sound)

In the collaboration with Sony Pictures Entertainment, Sony measured the sound environment of their studios and integrated the data of the measurement and Sony's own DSP (Digital Signal Processor) technology to develop "Digital Cinema Sound." "Digital Cinema Sound" simulates in a home theatre an ideal movie theatre sound environment based on the preference of movie director.

Enjoying movies with Cinema Studio EX

Cinema Studio EX is ideal for enjoying movie software encoded in multi channel format, such as Dolby Digital DVD. This mode reproduces the sound characteristics of Sony Pictures Entertainment's studios.

Press SOUND FIELD +/– on the remote repeatedly until "S.F 3," "S.F 4," or "S.F 5," appears in the front panel display.

If the system mode is set to anything except "VIDEO," each time you press SOUND FIELD +/–, "CINEMA STUDIO EX A," "CINEMA STUDIO EX B," or "CINEMA STUDIO EX C" momentarily appears on the TV screen.

■ CINEMA STUDIO EX A

Reproduces the sound characteristics of the Sony Pictures Entertainment "Cary Grant Theater" cinema production studio. This is a standard mode, great for watching most any type of movie.

■ CINEMA STUDIO EX B

Reproduces the sound characteristics of the Sony Pictures Entertainment "Kim Novak Theater" cinema production studio. This mode is ideal for watching science-fiction or action movies with lots of sound effects.

■ CINEMA STUDIO EX C

Reproduces the sound characteristics of the Sony Pictures Entertainment scoring stage. This mode is ideal for watching musicals or classic films where music is featured in the soundtrack.

About Cinema Studio EX

Cinema Studio EX consists of the following three elements.

- Virtual Multi Dimension
  Creates 5 sets of virtual speakers surrounding the listener from a single pair of actual rear speakers.
- Screen Depth Matching
  In a movie theatre, sound seems to come from inside the image reflected on the movie screen. This element creates the same sensation in your listening room by shifting the sound of the front speakers "into" the screen.
- Cinema Studio Reverberation
  Reproduces the reverberations peculiar to a movie theatre.

Cinema Studio EX is the integrated mode which operates these elements simultaneously.

Notes

- The effects provided by the virtual speakers may cause increased noise in the playback signal.
- When listening with sound fields that employ the virtual speakers, you will not be able to hear any sound coming directly from the rear speakers.

Selecting other sound fields

Press SOUND FIELD +/– on the remote repeatedly until the number for the sound field you want appears in the front panel display.

The current sound field number appears in the front panel display.

If the system mode is set to anything except "VIDEO," each time you press SOUND FIELD +/–, the sound field name momentarily appears on the TV screen.

continued

■ NORMAL SURROUND

Software with multi channel surround audio signals is played back according to the way it was recorded. Software with 2 channel audio signals is decoded with Dolby Pro Logic or Dolby Pro Logic II to create surround effects (page 73).

■ DIGITAL CONCERT HALL A

Uses 3D sound imaging to reproduce the sound characteristics of the CONCERTGEBOUW in Amsterdam, which is famous for a large sound stage produced by reflectivity.

■ DIGITAL CONCERT HALL B

Uses 3D sound imaging to reproduce the sound characteristics of the MUSIKVEREIN in Vienna, which is famous for its hall resonance and unique reverberative sound.

■ JAZZ CLUB

Reproduces the acoustics of a jazz club.

■ LIVE CONCERT

Reproduces the acoustics of a 300-seat live concert.

■ GAME

Obtains maximum audio impact from video game software.

■ HEADPHONE THEATER

When you connect your headphones to the PHONES jack of the control unit, the HEADPHONE THEATER mode allows you to experience a theatre like environment while listening through a pair of headphones. This mode is very effective with 5.1 ch discrete signal sources like Dolby Digital and DTS. Selecting any Sound Field (except AUTO DECODING or 2CHANNEL STEREO) enables the mode.

■ HEADPHONE 2CH

When you connect your headphones to the PHONES jack of the control unit, and the SOUND FIELD is set to AUTO DECODING or 2CHANNEL STEREO, HEADPHONE 2CH is automatically activated.
Each time you press SOUND FIELD +/–, HEADPHONE THEATER and HEADPHONE 2CH change alternately.

To check the sound field

Press DISPLAY.
The sound field appears on the TV screen, and the sound field number appears in the front panel display. The sound field on the TV screen turns off in a few seconds.
If the system mode is set to “VIDEO,” the TV screen momentarily changes.

To turn the surround effect off

Press SOUND FIELD +/– on the remote repeatedly until “S.F 1” or “S.F 11” appears in the front panel display.
If the system mode is set to anything except “VIDEO,” each time you press SOUND FIELD +/–, “AUTO DECODING” or “2CHANNEL STEREO” momentarily appears on the TV screen.

The system memorises the last sound field selected for each function mode (Sound Field Link)

Whenever you select a function such as DVD or TUNER, the sound field that was last applied to the function is automatically applied again. For example, if you listen to DVD with JAZZ CLUB as the sound field, then change to another function, and then return to DVD, JAZZ CLUB will be applied again. With the tuner, sound fields are memorised separately for all preset stations.

You can identify the encoding format of programme software by looking at its packaging

– Dolby Digital discs are labelled with the DOLBY DIGITAL logo.
– Dolby Surround encoded programmes are labelled with the DOLBY SURROUND PRO LOGIC logo.
– DTS Digital Surround discs are marked with DTS.

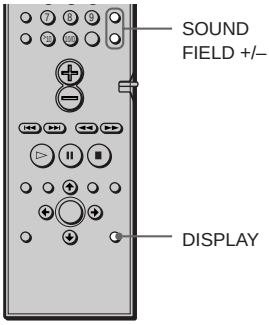
Notes

- When you play sound tracks with 96 kHz sampling frequency, the output signals will be converted to 48 kHz (sampling frequency).
- In the case of a MULTI or 2CHANNEL encoded Super Audio CD, AUTO DECODING is automatically set. When you connect your headphones to the PHONES jack of the control unit, HEADPHONE 2CH is automatically activated.

Using Only the Front Speakers and Subwoofer

(2 Channel Stereo)

DVD VIDEO CD CD MP3



Press SOUND FIELD +/– on the remote repeatedly until "S.F 11" appears in the front panel display.

If the system mode is set to anything except "VIDEO," each time you press SOUNDFIELD +/–, "2CHANNEL STEREO" momentarily appears on the TV screen.

This mode outputs the sound from the front left and right speakers and subwoofer. Standard two channel (stereo) sources completely bypass the sound field processing. Multi channel surround formats are downmixed to two channels.

This allows you to play any source using only the front left and right speakers and subwoofer.

To check the sound field

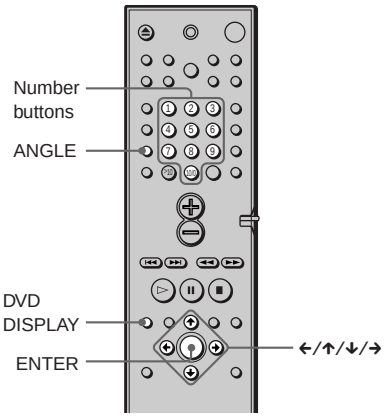
Press DISPLAY.

The sound field appears on the TV screen, and the sound field number appears in the front panel display. The sound field on the TV screen turns off in a few seconds.

If the system mode is set to "VIDEO," the TV screen momentarily changes.

Changing the Angles DVD

If various angles (multi-angles) for a scene are recorded on the DVD, “ANGLE” appears in the front panel display. This means that you can change the viewing angle.
For example, while playing a scene of a train in motion, you can display the view from either the front of the train, the left window of the train, or from the right window without having the train’s movement interrupted.

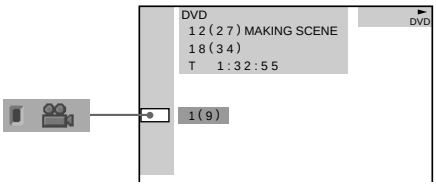


1 Press DVD DISPLAY during playback.

The Control Menu appears.

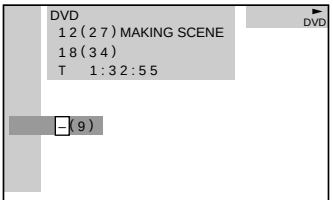
2 Press ↑/↓ to select (ANGLE).

The angle number appears.
The number in parentheses indicates the total number of angles.



3 Press → or ENTER.

The angle number changes to “-.”



4 Select the angle number using the number buttons or ↑/↓, then press ENTER.

The angle is changed to the selected angle.

To turn off the Control Menu

Press DVD DISPLAY repeatedly until the Control Menu is turned off.

You can select the angle directly by pressing ANGLE. Each time you press the button, the angle changes.

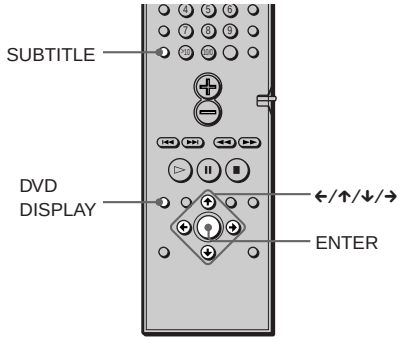
Note

Depending on the DVD, you may not be able to change the angles, even if multi-angles are recorded on the DVD.

Displaying the Subtitles

DVD

If subtitles are recorded on the discs, you can turn the subtitles on and off while playing. If multilingual subtitles are recorded on the disc, you can change the subtitle language while playing, or turn the subtitles on or off whenever you want. For example, you can select the language you want to practice and turn the subtitles on for better understanding.

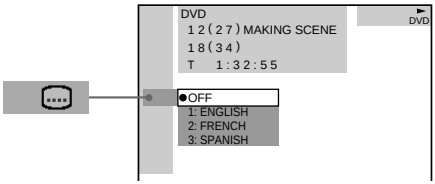


1 **Press DVD DISPLAY during playback.**

The Control Menu appears.

2 **Press ↑/↓ to select (SUBTITLE), then press ENTER.**

The options for SUBTITLE appear.



3 **Press ↑/↓ to select the language.**

Depending on the DVD, the choice of language varies.
When 4 digits are displayed, they indicate the language code. Refer to the language code list on page 83 to see which language the code represents.

4 **Press ENTER.**

To cancel the SUBTITLE setting

Select “OFF” in Step 3.

To turn off the Control Menu

Press DVD DISPLAY repeatedly until the Control Menu is turned off.

You can select SUBTITLE directly by pressing SUBTITLE. Each time you press the button, the item changes.

Note

Depending on the DVD, you may not be able to change the subtitles even if multilingual subtitles are recorded on it.

Locking Discs (CUSTOM PARENTAL CONTROL, PARENTAL CONTROL)

You can set two kinds of playback restrictions for a disc.

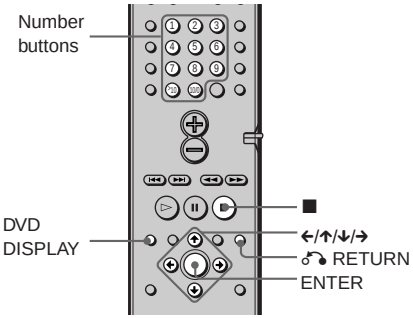
- Custom Parental Control
  You can set the playback restrictions so that the system will not play inappropriate discs.
- Parental Control
  Playback of some DVDs can be limited according to a predetermined level such as the age of the users.

The same password is used for both Parental Control and Custom Parental Control.

Custom Parental Control

DVD VIDEO CD SA-CD CD MP3

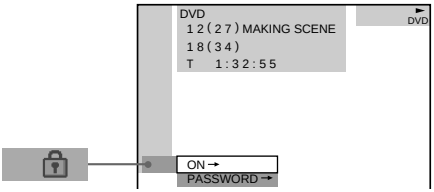
You can set the same Custom Parental Control password for up to 25 discs. When you set the 26th disc, the playback restriction of the disc for which you first set the password is cancelled.



1 **Insert the disc you want to lock.**
If the disc is playing, press ■ to stop playback.

2 **In stop mode, press DVD DISPLAY.**
The Control Menu appears.

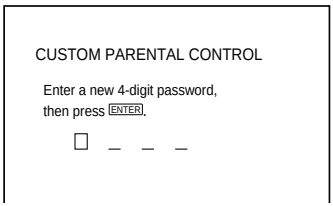
3 **Press ↑/↓ to select (CUSTOM PARENTAL CONTROL), then press ENTER.**
"CUSTOM PARENTAL CONTROL" is selected.



4 **Press ↑/↓ to select "ON →," then press ENTER.**

■When you have not entered a password

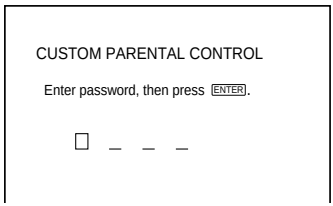
The display for registering a new password appears.



Enter a 4-digit password by using the number buttons, then press ENTER. The display for confirming the password appears.

■When you have already registered a password

The display for entering the password appears.



5 **Enter or re-enter your 4-digit password by using the number buttons, then press ENTER.**
"Custom parental control is set." appears and the screen returns to the Control Menu display.

If you make a mistake entering your password
Press ← before you press ENTER and input the correct number.

If you make a mistake
Press ↩ RETURN, then start from Step 3 again.

To turn off the Control Menu
Press DVD DISPLAY repeatedly until the Control Menu is turned off.

To turn off the Custom Parental Control function
1 In Step 4, select "OFF →," then press ENTER.

2 Enter your 4-digit password using the number buttons, then press ENTER.

To change the password
1 In Step 4, press ↑/↓ to select "PASSWORD →," then press ENTER. The display for entering the password appears.

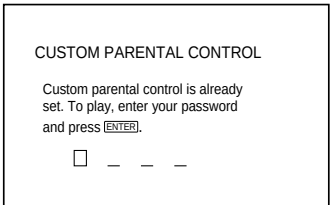
2 Enter your 4-digit password using the number buttons, then press ENTER.

3 Enter a new 4-digit password using the number buttons, then press ENTER.

4 To confirm your password, re-enter it using the number buttons, then press ENTER.

Playing the disc for which Custom Parental Control is set

1 **Insert the disc for which Custom Parental Control is set.**
The CUSTOM PARENTAL CONTROL display appears.



2 **Enter your 4-digit password using the number buttons, then press ENTER.**
The system is ready for playback.

Notes

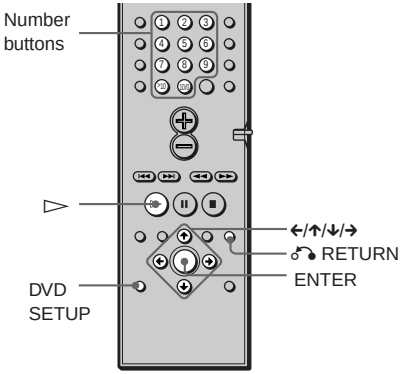
- When you change the layer or area in a Super Audio CD which has Custom Parental Control set, the display for entering the password may appear.
- When you set the Custom Parental Control password for a Hybrid Super Audio CD, the Custom Parental Control setting only works for the current layer.

If you forget your password, enter the 6-digit number "199703" using the number buttons when the CUSTOM PARENTAL CONTROL display asks you for your password, then press ENTER. The display will ask you to enter a new 4-digit password.

Limiting playback for children (Parental Control) DVD

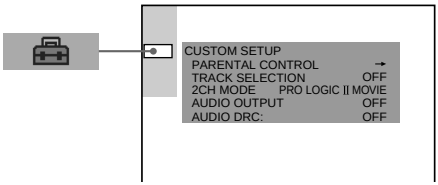
Playback of some DVDs can be limited according to a predetermined level such as the age of the users. The "Parental Control" function allows you to set a playback limitation level.
A scene that is limited is not played, or it is replaced by a different scene.

continued



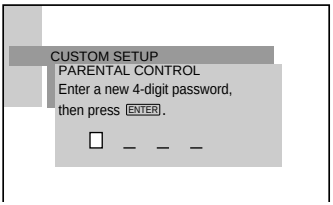
1 **In stop mode, press DVD SETUP.**
The Setup Display appears.

2 **Press ↑/↓ to select "CUSTOM SETUP," then press ENTER.**
"CUSTOM SETUP" is displayed.



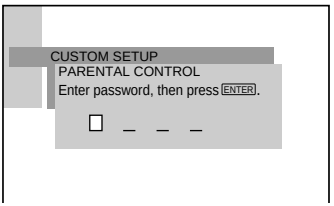
3 **Press ↑/↓ to select "PARENTAL CONTROL →," then press ENTER.**

■If you have not entered a password
The display for registering a new password appears.

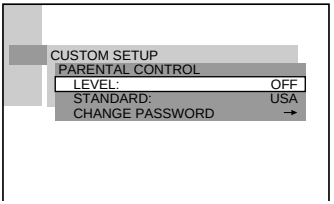


Enter a 4-digit password using the number buttons, then press ENTER.
The display for confirming the password appears.

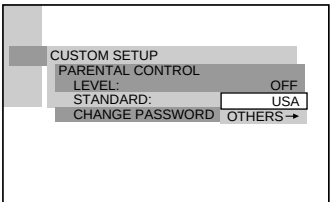
■When you have already registered a password
The display for entering the password appears.



4 **Enter or re-enter your password using the number buttons, then press ENTER.**
The display for setting the playback limitation level and changing the password appears.

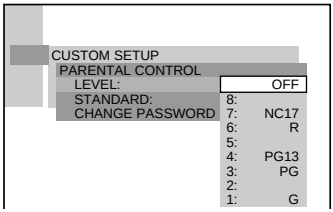


5 **Press ↑/↓ to select "STANDARD," then press ENTER.**
The selection items for "STANDARD" are displayed.

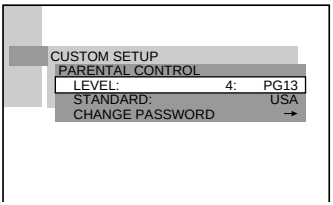


6 **Press ↑/↓ to select a geographic area as the playback limitation level, then press ENTER.**
The area is selected.
If you select "OTHERS →," select and enter the standard code in the table on page 62 using the number buttons.

7 **Press ↑/↓ to select "LEVEL," then press ENTER.**
The selection items for "LEVEL" are displayed.



8 **Select the level you want using ↑/↓, then press ENTER.**
Parental Control setting is complete.



The lower the value, the more strict the limitation.

If you make a mistake

Press ↩ RETURN to go back to the previous screen.

To turn off the Setup Display

Press DVD SETUP repeatedly until the Setup Display is turned off.

To turn off the Parental Control function and play the DVD after entering your password

Set "LEVEL" to "OFF" in Step 8.

To change the password

1 In Step 5, select "CHANGE PASSWORD →" using ↓, then press ENTER.
The display for entering the password appears.

2 Follow Step 3 to enter a new password.

Playing the disc for which Parental Control is set

1 **Insert the disc and press ▷.**
The PARENTAL CONTROL display appears.

2 **Enter your 4-digit password using the number buttons, then press ENTER.**
The system starts playback.

If you forget your password, remove the disc and repeat Step 1 to 3 of "Limiting playback for children." When you are asked to enter your password, enter "199703" using the number buttons, then press ENTER. The display will ask you to enter a new 4-digit password. After you enter a new 4-digit password in Step 3, replace the disc in the system and press ▷. When the PARENTAL CONTROL display appears, enter your new password.

Notes

- When you play DVDs which do not have the Parental Control function, playback cannot be limited on this system.
- Depending on the DVD, you may be asked to change the parental control level while playing the disc. In this case, enter your password, then change the level. If the Resume Play mode is cancelled, the level returns to the original level.

continued

Area Code

Standard	Code number	Standard	Code number
Argentina	2044	Korea	2304
Australia	2047	Malaysia	2363
Austria	2046	Mexico	2362
Belgium	2057	Netherlands	2376
Brazil	2070	New Zealand	2390
Canada	2079	Norway	2379
Chile	2090	Pakistan	2427
China	2092	Philippines	2424
Denmark	2115	Portugal	2436
Finland	2165	Russia	2489
France	2174	Singapore	2501
Germany	2109	Spain	2149
Hong Kong	2219	Sweden	2499
India	2248	Switzerland	2086
Indonesia	2238	Taiwan	2543
Italy	2254	Thailand	2528
Japan	2276	United Kingdom	2184

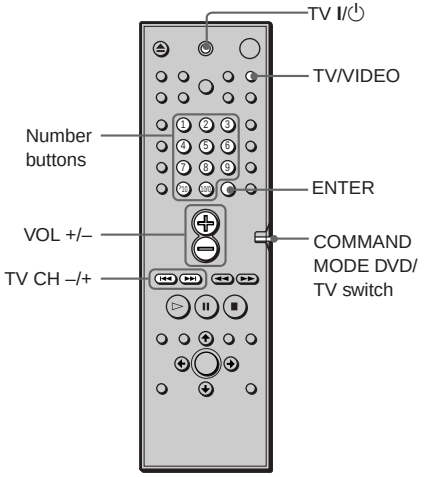
Controlling the TV With the Supplied Remote

By adjusting the remote signal, you can control your TV with the supplied remote.

Notes

- If you enter a new code number, the code number previously entered will be erased.
- When you replace the batteries of the remote, the code number may be reset to the default (SONY) setting. Reset the appropriate code number.

Controlling TVs with the remote



Press and hold TV I/⏻ while entering your TV's manufacturer's code (see the table) using the number buttons and press ENTER. Then release TV I/⏻.

Code numbers of controllable TVs

If more than one code number is listed, try entering them one at a time until you find the one that works with your TV.

TV

Manufacturer	Code number
SONY	001
DAEWOO	002, 004, 005, 006, 007, 015
FISHER	008
GOLDSTAR	002, 003, 011, 012, 015, 034
GRUNDIG	017, 034
HITACHI	002, 013, 014, 015
ITT/NOKIA	021, 022
JVC	016
MAGNAVOX	002, 003, 018
MITSUBISHI/MGA	002, 003, 019
NEC	002, 003, 020
PANASONIC	009, 024
PHILIPS	015, 018
PIONEER	009, 025, 026, 040
RCA/PROSCAN	002, 010, 027, 028, 029
SAMSUNG	002, 003, 015, 031, 032, 033, 034
SANYO	008, 044, 045, 046
SHARP	035
TELEFUNKEN	023, 036, 037, 038
THOMSON	030, 037, 039
TOSHIBA	035, 040, 041
ZENITH	042, 043

CATV

Manufacturer	Code number
SONY	101
HAMLIN/REGAL	123, 124, 125, 126, 127
JERROLD/GI	102, 103, 104, 105, 106, 107, 108, 109, 119, 131
OAK	128, 129, 130
PANASONIC	120, 121, 122
PIONEER	115, 116
SCIENTIFIC ATLANTA	110, 111, 112
TOCOM	117, 118, 131
ZENITH	113, 114

continued

Controlling the TV

You can control your TV using the buttons below.

By pressing	You can
TV I/⏻	Turn the TV on or off.
TV/VIDEO	Switch the TV's input source between the TV and other input sources.

Switching between TV and DVD

Using the COMMAND MODE DVD/TV switch, you can switch the remote signal between control of the TV and control of the DVD unit. When you watch the DVD, ensure that you have the COMMAND MODE DVD/TV switch set to DVD.

The table below shows the buttons that are affected by the COMMAND MODE DVD/TV switch.

Button	DVD	TV
1~9,* >10, 10/0	Standard number button function for DVD.	Selects the TV Channels.
ENTER	Standard enter function for DVD.	Confirms the selected channel. Occasionally you may be able to select channel 12 directly.
⏮	Standard preceding title, chapter skip function for DVD.	TV CH –
⏭	Standard forward title, chapter skip for DVD.	TV CH +
⊕	VOL +	VOL +
⊖	VOL –	VOL –

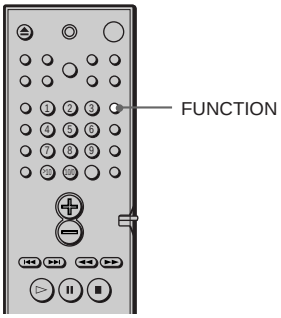
Note

Depending on the TV, you may not be able to control your TV or to use some of the buttons above.

* For double digit number, press >10, then the number. (For example, press >10, then 2 and 5 for entering 25.)

Using the Video or Other Unit

You can use VCRs or other units connected to the EURO AV INPUT (FROM VIDEO) jack. Refer to the operation manual supplied with the unit for further information.

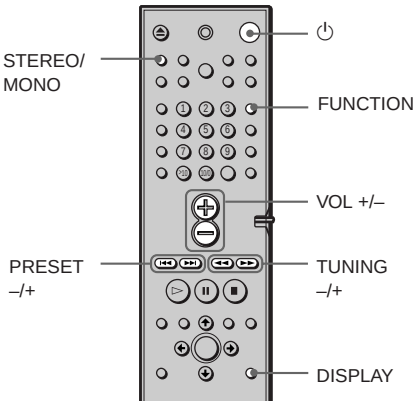


Press FUNCTION repeatedly until "VIDEO" appears in the front panel display.

Each time you press FUNCTION, the mode of the system changes in the following sequence:
DVD → VIDEO → TUNER → DVD...

Listening to the Radio

Preset radio stations in the system's memory first (see "Presetting Radio Stations" on page 34).



1 **Press FUNCTION repeatedly until TUNER appears in the front panel display.**

The last received station is tuned in, and the TUNER information appears on the TV screen.

2 **Press PRESET + or – repeatedly to select the preset station you want.**

Each time you press the button, the system tunes in one preset station.

3 **Adjust the volume by pressing VOL +/–.**

To turn off the radio

Press ⏻.

To listen to non-preset radio stations

Use manual or automatic tuning in Step 2.
For manual tuning, press TUNING + or – on the remote repeatedly.
For automatic tuning, press and hold TUNING + or – on the remote.

If an FM programme is noisy

Press STEREO/MONO on the remote so that "MONO" appears in the front panel display. There will be no stereo effect, but the reception will improve. Press the button again to restore the stereo effect.

To improve reception

Reorient the supplied aerials.

You can also operate the system on the control unit. For details, see "Using the control button" on page 37.

To check the sound field

Press DISPLAY.
The TUNER information closes and the sound field appears on the TV screen. After a few seconds, the sound field screen closes and the TUNER information appears again.

Using the Radio Data System (RDS)

What is the Radio Data System?

Radio Data System (RDS) is a broadcasting service that allows radio stations to send additional information along with the regular programme signal. This tuner offers convenient RDS features such as station name display. RDS is available only for FM stations.*

Note

RDS may not work properly if the station you are tuned to is not transmitting the RDS signal properly, or if the signal strength is weak.

* Not all FM stations provide RDS service, nor do they provide the same type of services. If you are not familiar with the RDS system, check with your local radio stations for details on RDS services in your area.

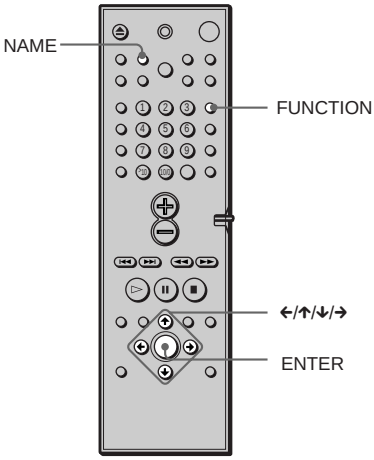
Receiving RDS broadcasts

Simply select a station from the FM band. When you tune in a station that provides RDS services, the station name* appears on the TUNER information.

* If the RDS broadcast is not received, the station name may not appear in the display.

Naming Preset Stations

You can enter a name of up to 8 characters for preset stations. These names (for example, “XYZ”) appear in the TV screen when a station is selected.
Note that no more than one name can be entered for each preset station.



1 **Press FUNCTION repeatedly until “TUNER” appears in the front panel display.**

The last received station is tuned in, and the TUNER information appears on the TV screen.
Each time you press FUNCTION, the mode of the system changes in the following sequence:
DVD → VIDEO → TUNER → DVD...

2 **Tune in the preset station you want to create an index name for.**

If you are not familiar with how to tune in preset stations, see “Listening to the Radio” on page 65.

3 **Press NAME.**

4 **Create an index name by using the cursor buttons:**
Press ↓/↑ to select a character, then press → to move the cursor to the next position.

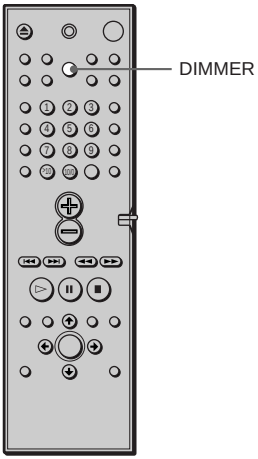
If you make a mistake
Press ← or → repeatedly until the character to be changed flashes, then press ↓/↑ to select the right character.

5 **Press ENTER.**

To assign index names to other stations
Repeat Steps 2 to 5.

Changing the Brightness of the Front Panel Display

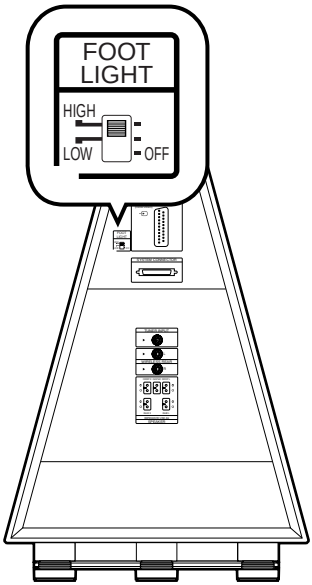
There are two levels of brightness for the front panel display.
Adjust the brightness according to your room's lighting conditions.



Press DIMMER on the remote.
Every time you press this button, the front panel display changes as follows:
Bright ⟷ Dim

Changing the Brightness of the Subwoofer's Foot Light

You can change the brightness of the subwoofer's foot light using the switch on the subwoofer.
Adjust the brightness according to your room's design and lighting conditions.



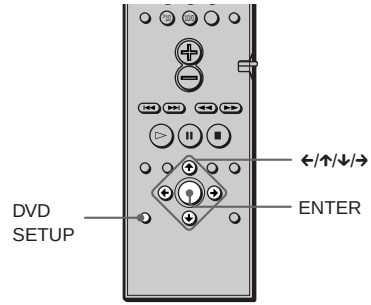
Slide the FOOT LIGHT switch on the rear panel of the subwoofer to HIGH, LOW, or OFF.

Using the Setup Display

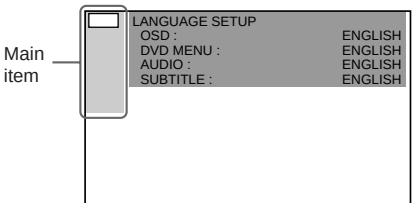
DVD VIDEO CD SA-CD CD MP3

By using the Setup Display, you can make various adjustments to items such as picture and sound. You can also set a language for the subtitles and the Setup Display, among other things. For details on each Setup Display item, see page 70-73. For an overall list of Setup Display items, see page 84.

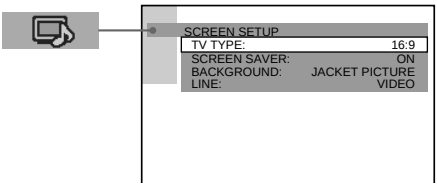
How to use the Setup Display



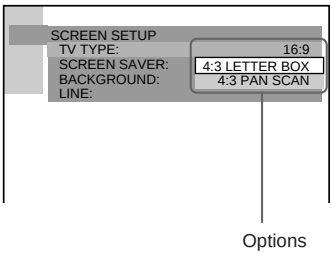
1 In stop mode, press DVD SETUP.
The Setup Display appears.



2 Press ↑/↓ to select the setup item from the displayed list: "LANGUAGE SETUP," "SCREEN SETUP," "CUSTOM SETUP," "SPEAKER SETUP," and "RESET*." Then press ENTER or →.
The selected Setup item appears.
Example: "SCREEN SETUP"



3 Select an item using ↑/↓, then press ENTER or →.
The options for the selected item appear.
Example: "TV TYPE"

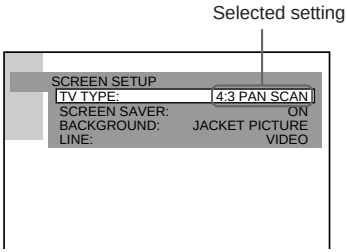


continued

4 Select a setting using ↑/↓, then press ENTER.

The setting is selected and setup is complete.

Example: “4:3 PAN SCAN”



To turn off the Setup Display

Press DVD SETUP or DVD DISPLAY repeatedly until the Setup Display is turned off.

* When you select “RESET” ⇨◇⇦ in step 2, the default settings are changed as follows:
  –Return to the default setting
  • Setup Menu (except for the PARENTAL CONTROL) (page 84)
  • Speaker parameter
  • Sound field
  • Dimmer
  –Clear the setting
  • Preset Station
  • Station name

  After you select “RESET” and press ENTER, select “YES” to reset the settings (it takes a few seconds to complete). When the reset is finished, the function changes to DVD mode. Select “NO” and press ENTER to return to the Control Menu. Do not press ⏻ on the subwoofer or ⏻ on the remote when resetting the system.

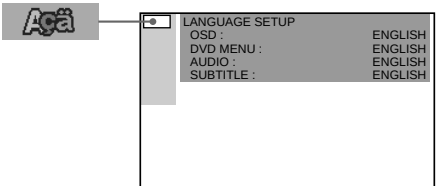
Setting the Display or Sound Track Language

(LANGUAGE SETUP)

DVD VIDEO CD SA-CD CD MP3

“LANGUAGE SETUP” allows you to set various languages for the on-screen display or sound track.

Select “LANGUAGE SETUP” in the Setup Display. For details on using the display, see “Using the Setup Display” (page 69).



■OSD (On-Screen Display)

Switches the display language on the screen. Selects the language from the displayed list.

■DVD MENU (DVD only)

Selects the desired language for the DVD menu.

■AUDIO (DVD only)

Switches the language of the sound track. Selects the language from the displayed list.

■SUBTITLE (DVD only)

Switches the language of the subtitle. Selects the language from the displayed list.

If you select “OTHERS →” in “DVD MENU,” “SUBTITLE,” or “AUDIO,” select and enter the language code from the list using the number buttons (page 83).
After you have made a selection, the language code (4 digits) is displayed the next time you select “OTHERS →.”

Note

If you select a language that is not recorded on the DVD, one of the recorded languages will be automatically selected (except for the “OSD”).

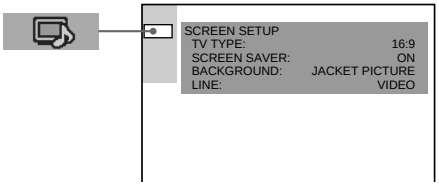
Settings for the Display

(SCREEN SETUP)

DVD VIDEO CD SA-CD CD MP3

Choose settings according to the TV to be connected.

Select “SCREEN SETUP” in the Setup Display. For details on using the display, see “Using the Setup Display” (page 69).
The default settings are underlined.



■TV TYPE (DVD only)

Selects the aspect ratio of the connected TV (4:3 standard or wide).

16:9	Select this when you connect a wide-screen TV or a TV with a wide mode function.
4:3 LETTER BOX	Select this when you connect a 4:3 screen TV. Displays a wide picture with bands on the upper and lower portions of the screen.
4:3 PAN SCAN	Select this when you connect a 4:3 screen TV. Automatically displays the wide picture on the entire screen and cuts off the portions that do not fit.

16:9

4:3 LETTER BOX

4:3 PAN SCAN

Note

Depending on the DVD, “4:3 LETTER BOX” may be selected automatically instead of “4:3 PAN SCAN” or vice versa.

■SCREEN SAVER

Turns the screen saver on and off so that the screen saver image appears when you leave the system in pause or stop mode for 15 minutes, or when you playback a CD for more than 15 minutes. The screen saver will help prevent your display device from becoming damaged (ghosting). Press ▷ to turn off the screen saver.

ON	Turns on the screen saver.
OFF	Turns off the screen saver.

■BACKGROUND

Selects the background colour or picture on the TV screen in stop mode or while playing a CD.

JACKET PICTURE	The jacket picture (still picture) appears in the background, but only when the jacket picture is already recorded on the disc (CD-EXTRA, etc.). If the disc does not contain a jacket picture, the “GRAPHICS” picture appears.
GRAPHICS	A preset picture stored in the system appears in the background.
BLUE	The background colour is blue.
BLACK	The background colour is black.

continued

■ LINE

Select the method of outputting video signals from the ⇨ EURO AV OUTPUT (TO TV) jack on the rear panel of the subwoofer.

VIDEO	Outputs video signals.
RGB	Outputs RGB signals.

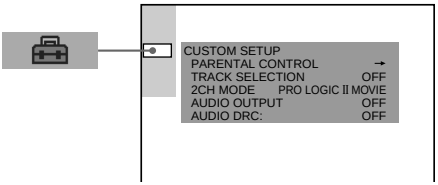
Note

If your TV does not conform to the RGB signals, no picture appears on the TV screen even if you select "RGB." Refer to the instructions supplied with your TV.

Custom Settings (CUSTOM SETUP) DVD VIDEO CD SA-CD CD MP3

Allows setting up Parental Control and other settings.

Select "CUSTOM SETUP" in the Setup Display. For details on using the display, see "Using the Setup Display" (page 69).
The default settings are underlined.



■PARENTAL CONTROL → (DVD only)

Sets a password and playback limitation level for DVDs with playback limitation for children. For details, see "Limiting playback for children (Parental Control)" (page 59).

■TRACK SELECTION (DVD only)

Gives the sound track having the highest number of channels priority when you play a DVD on which multiple audio formats (PCM, MPEG audio, DTS, or Dolby Digital format) are recorded.

OFF	No priority given.
AUTO	Priority given.

Notes

- When you set the item to "AUTO," the language may change. The "TRACK SELECTION" setting has higher priority than the "AUDIO" settings in "LANGUAGE SETUP" (page 70).
- If PCM, DTS, MPEG audio, and Dolby Digital sound tracks have the same number of channels, the system selects PCM, DTS, Dolby Digital, and MPEG audio sound tracks in this order.
- Depending on the DVD, the audio channel with priority may be predetermined. In this case, you cannot give priority to the DTS, Dolby Digital, or MPEG audio format by selecting "AUTO."

■ 2CH MODE

This system incorporates Dolby Pro Logic II with movie mode and music mode, and can reproduce in 5.1 channel (and 2channel) surround sound through Dolby Pro Logic II. When the Sound Field is set to “NORMAL SURROUND,” you can select the type of decoding for a 2 channel source.

PRO LOGIC II MOVIE	Performs the Pro Logic II movie mode decoding. This setting is ideal for the movies encoded in Dolby Surround. Besides, this mode can reproduce the sound in 5.1 channel when watching the videos of old movies or in the dubbed language.
PRO LOGIC II MUSIC	Performs the Pro Logic II music mode decoding. This setting is ideal for the standard stereo sources, such as CDs.
PRO LOGIC	Performs the Pro Logic decoding. A source recorded in 2 channel is decoded into 4 channels.

Note

Dolby Pro Logic II does not function for DTS or MPEG format signals or Super Audio CD.

■ AUDIO OUTPUT

Selects whether or not to output downmixed audio signals from the SCART jack.
When playing a DVD that has rear sound elements (channels), or is recorded in Dolby Digital format, the player can downmix the channels to two channels, and output them from the SCART jack.

OFF	No downmixed signals are output from the SCART jack.
ON	Outputs the downmixed signals from the SCART jack.

■ AUDIO DRC

Narrows the DYNAMIC range of the sound track.
Useful for watching movies at low volume late at night.

OFF	No compression of DYNAMIC range.
ON	Reproduces the sound track with the kind of DYNAMIC range that the recording engineer intended.

Note

DYNAMIC range compression only works for Dolby Digital sources.

Settings for the Speakers

(SPEAKER SETUP)

See “Speaker Setup” on page 29.

Troubleshooting

If you experience any of the following difficulties while using the system, use this troubleshooting guide to help remedy the problem before requesting repairs. Should any problem persist, consult your nearest Sony dealer.
In the case of repair, all system components are required to be checked in order to locate a malfunction*.

* It may not be necessary to bring all components of the system for repair, depending on the nature of the malfunction. Consult your nearest Sony dealer.

Power

The power is not turned on.

➡ Check that the mains lead is connected securely.

Picture

There is no picture.

➡ The SCART (EURO AV) cord is not connected securely.
➡ The SCART (EURO AV) cord is damaged.
➡ The system is not connected to the correct ⇦ EURO AV INPUT jack (page 26).
➡ The video input on the TV is not set so that you can view pictures from the system.

Picture noise appears.

➡ The disc is dirty or flawed.
➡ If the picture output from your system goes through your VCR to get to your TV, the copy-protection signal applied to some DVD programmes could affect picture quality.

Even though you set the aspect ratio in "TV TYPE" of "SCREEN SETUP," the picture does not fill the screen.

➡ The aspect ratio of the disc is fixed on your DVD.

Sound

There is no sound.

➡ Press MUTING on the remote if "MUTING" is displayed in the front panel display.
➡ The protective device on the system has been activated because of a short circuit. Turn off the system, eliminate the short-circuit problem and turn on the power again.
➡ The system is in pause mode or in Slow-motion Play mode. Press ▷ to return to normal play mode.
➡ Fast forward or fast reverse is performed. Press ▷ to return to normal play mode.
➡ Check the speaker settings (pages 29).
➡ Wired/Wireless setting of the rear speaker is not correct (page32).
➡ The power of the rear speaker is on when you use the speakers in the Wired setting.
➡ The wireless data output cord is not connected to the front speaker securely when you use the rear speakers in Wireless setting. The wireless data output cord is damaged.

The left and right sounds are unbalanced or reversed.

➡ Check that the speakers and components are connected correctly and securely.
➡ Adjust the balance parameter in the BALANCE menu (pages 32).

Severe hum or noise is heard.

➡ Check that the speakers and components are connected securely.
➡ Check that the connecting cords are away from a transformer or motor, and at least 3 metres away from a TV set or fluorescent light.
➡ Move your TV away from the audio components.
➡ The plugs and jacks are dirty. Wipe them with a cloth slightly moistened with alcohol.
➡ Clean the disc.

The sound loses stereo effect when you play a VIDEO CD, or a CD.

➡ Set “AUDIO” to “STEREO” in the Control Menu display (page 50).
➡ Make sure you connect the system appropriately.

The surround effect is difficult to hear when you are playing a Dolby Digital or MPEG audio sound track.

➡ Make sure the sound field function is on (page 52).
➡ Check the speaker connections and setting (pages 29).
➡ Depending on the DVD, the output signal may not be the entire 5.1 channel. It may be monaural or stereo even if the sound track is recorded in Dolby Digital or MPEG audio format.

The sound comes from the center speaker only.

➡ Depending on the disc, the sound may come from the center speaker only.

No sound is heard from the center speaker.

➡ Check the speaker connections and settings.
➡ Make sure the sound field function is on (page 52).
➡ Select a sound field containing the word “cinema” (page 52).

No sound or only a very low-level sound is heard from the rear speakers.

➡ Check the speaker connections and settings.
➡ Make sure the sound field function is on (page 52).
➡ Select a sound field containing the word “cinema” (page 52).

Operation

Radio stations cannot be tuned in.

➡ Check that the tuner is connected securely. Connect an external aerial if necessary.
➡ The signal strength of the stations is too weak (when tuning in with automatic tuning). Use direct tuning.
➡ No stations have been preset or the preset stations have been cleared (when tuning by scanning preset stations). Preset the stations (page 34).

The remote does not function.

➡ There are obstacles between the remote and the system.
➡ The distance between the remote and the system is too far.
➡ The remote is not pointed at the remote sensor on the system.
➡ The solar battery is not charged enough (page 18).
➡ The batteries in the remote are weak.

The remote does not function even after the solar battery is charged in the light of the room.

➡ Press the RESET button on the upper rear side of the remote using a pointed object such as the tip of a mechanical pencil (page 18).

The disc does not play.

➡ There is no disc inside.
➡ The disc is turned over.
Insert the disc with the lablled side facing to the front into the disc slot.
➡ The disc is skewed.
➡ The system cannot play CD-ROMs, etc. (page 8).
➡ The region code on the DVD does not match the system.
➡ Moisture has condensed inside the system. Remove the disc and leave the system turned on for about half an hour (page 2).

continued

The MP3 audio track cannot be played.

➡ The DATA CD is not recorded in the MP3 format that conforms to ISO9660 Level 1/ Level 2 or Joliet.

➡ The MP3 audio track does not have the extension ".MP3."

➡ The data is not formatted in MP3 even though it has the extension ".MP3."

➡ The system cannot play audio tracks in MP3PRO format.

The title of the MP3 audio album or track is not correctly displayed.

➡ The system can only display numbers and alphabet. Other characters are displayed as " ".

The display for entering the password does not appear for a Super Audio CD, even through Custom Parental Control is set.

➡ Custom Parental Control is set for different layers of a Super Audio CD.

The disc does not start playing from the beginning.

➡ Programme Play, Shuffle Play, or Repeat Play has been selected (pages 42, 44, 45). Press CLEAR to cancel these functions before playing a disc.

➡ Resume Play has been selected. During stop, press ■ and then start playback (page 38).

➡ The title, DVD or PBC menu automatically appears on the TV screen.

The system starts playing the disc automatically.

➡ The DVD features an auto playback function.

Playback stops automatically.

➡ Some discs may contain an auto pause signal. While playing such a disc, the system stops playback at the auto pause signal.

The system turned off during DVD playback.

➡ If approximately one hour passes with DVD playback paused or with the DVD top menu or a DVD menu displayed during DVD playback, the system automatically turns off.

You cannot perform some functions such as Stop, Search, Slow-motion Play, Repeat Play, Shuffle Play, or Programme Play.

➡ Depending on the disc, you may not be able to do some of the operations above. See the operating manual that comes with the disc.

Messages do not appear on the screen in the language you want.

➡ In the Setup Display, select the desired language for the on-screen display in "OSD" under "LANGUAGE SETUP" (page 70).

The language for the sound track cannot be changed.

➡ Multilingual tracks are not recorded on the DVD being played.

➡ The DVD prohibits changing the language for the sound track.

The subtitle language cannot be changed.

➡ Multilingual subtitles are not recorded on the DVD being played.

➡ The DVD prohibits changing the subtitles.

The subtitle cannot be turned off.

➡ The DVD prohibits turning off subtitles.

The angles cannot be changed.

➡ Multi-angles are not recorded on the DVD being played. The angle can be changed only when the "ANGLE" indicator lights up in the front panel display.

➡ The DVD prohibits changing the angles.

The system does not operate properly.

➡ If static electricity, etc., causes the system to operate abnormally, press ⏻ on the subwoofer to turn the system off and then on again.

Subwoofer's foot light is not lit/dim/bright.

➡ Adjust the brightness using the FOOT LIGHT swich on the rear panel of the subwoofer (page 68).

Front panel display is dim.

➡ Press DIMMER on the remote to adjust the brightness (page 67).

Nothing is displayed in the front panel display.

➡ The system is in standby mode (page 37).

A 5-character service number is displayed on the screen. (Some numbers also appear in the front panel display.)

➡ The self-diagnosis function is activated (See the table on page 77).

A disc cannot be ejected and "LOCKED" appears in the front panel display.

➡ Contact your Sony dealer or local authorized Sony service facility.

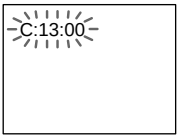
"ERROR" appears in the front panel display, and the backlight of the front panel blinks on and off.

➡ The speaker protection circuit is activated. Check the speaker connections.

Self-diagnosis Function

(When letters/numbers appear in the display)

When the self-diagnosis function is activated to prevent the system from malfunctioning. In this case a five-character service number (e.g., C 13 00) with a combination of a letter and digits appears on the screen (Some numbers also appear in the front panel display).
Refer to the following table.



First three characters of the service number	Cause and/or Corrective Action
C 13	The disc is dirty. ➡ Clean the disc with a soft cloth (page 9).
C 31	The disc is not inserted correctly. ➡ Re-insert the disc correctly.
C 71	The tuner is not connected correctly. ➡ Check that it is connected correctly.
E XXXX (xxxx is a number)	To prevent a malfunction, the system has performed the self-diagnosis function. ➡ Contact your nearest Sony dealer or local authorized Sony service facility and give the 5-character service number. Example: E 61 10

Glossary

Album
Section of a music piece on a data CD containing MP3 audio tracks.

Chapter
Sections of a picture or a music piece on a DVD that are smaller than titles. A title is composed of several chapters.

Digital Cinema Sound (DCS)
This is the generic name of the surround sound produced by digital signal processing technology developed by Sony. Unlike previous surround sound fields mainly directed at the reproduction of music, Digital Cinema Sound is designed specifically for the enjoyment of movies.

Digital Infrared Audio Transmission
Recent times have been witness to the rapid spread of DVDs, Digital Broadcasting Satellite Receiver and other high-quality media. In order to ensure that the subtle nuances endowed by these high-quality media would be transmitted with no accompanying deterioration, Sony developed a technology called “Digital Infrared Audio Transmission” for the infrared transmission of digital audio signals using no compression, and it introduced it into the DAV-DS1000.
This technology transfers digital audio signals using no compression inside the subcarrier frequency band allocated by the IEC (International Electronic Committee) and JEITA (Japan Electronics and Information Technology Industries Association) for hi-fi audio transmission applications. Its transmission quality is on a par with CDs or even better. (See Fig. 1)

Hi-fi audio transmission band (2 to 6 MHz)

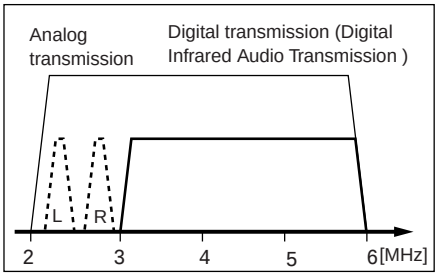


Fig.1 Signal spectrum for digital infrared audio transmission

Dolby Digital
This sound format for movie theatres is more advanced than Dolby Surround Pro Logic. In this format, the rear speakers output stereo sound with an expanded frequency range and a subwoofer channel for deep bass is independently provided. This format is also called “5.1” because the subwoofer channel is counted as 0.1 channel (since it functions only when a deep bass effect is needed). All six channels in this format are recorded separately to realize superior channel separation. Furthermore, since all the signals are processed digitally, less signal degradation occurs.

Dolby Pro Logic II
Dolby Pro Logic II creates five full-bandwidth output channels from two-channel sources. This is done using an advanced, high-purity matrix surround decoder that extracts the spatial properties of the original recording without adding any new sounds or tonal colorations.

Movie mode
The Movie mode is for use with stereo television shows and all programs encoded in Dolby Surround. The result is enhanced soundfield directionality that approaches the quality of discrete 5.1-channel sound.

Music mode
The Music mode is for use with any stereo music recordings, and provides a wide and deep sound space.

Dolby Surround Pro Logic

As one method of decoding Dolby Surround, Dolby Surround Pro Logic produces four channels from two-channel sound. Compared with the former Dolby Surround system, Dolby Surround Pro Logic reproduces left-to-right panning more naturally and localizes sounds more precisely. To take full advantage of Dolby Surround Pro Logic, you should have one pair of rear speakers and a center speaker. The rear speakers output monaural sound.

DTS

Digital audio compression technology that the Digital Theater Systems, Inc. developed. This technology conforms to 5.1-channel surround. The rear channel is stereo and there is discrete subwoofer channel in this format. DTS provides the same 5.1 discrete channels of high quality digital audio. The good channel separation is realized because the all channel data is recorded discrete and processed in digital.

DVD

A disc that contains up to 8 hours of moving pictures even though its diameter is the same as a CD.
The data capacity of a single-layer and single-sided DVD, at 4.7 GB (Giga Byte), is 7 times that of a CD. Furthermore, the data capacity of a dual-layer and single-sided DVD is 8.5 GB, a single-layer and double-sided DVD 9.4 GB, and a dual-layer and double-sided DVD 17 GB.
The picture data uses the MPEG 2 format, one of the worldwide standards of digital compression technology. The picture data is compressed to about 1/40 of its original size. The DVD also uses the variable rate coding technology that changes the data to be allocated according to the status of the picture.
The audio data is recorded in Dolby Digital as well as in PCM, allowing you to enjoy more realistic audio presence.
Furthermore, various advanced functions such as the multi-angle, multilingual, and Parental Control functions are provided with the DVD.

Film based software, Video based software

DVDs can be classified as Film based or Video based software. Film based DVDs contain the same images (24 frames per second) that are shown at movie theatres. Video based DVDs, such as television dramas or sit-coms, displays images at 30 frames (or 60 fields) per second.

Multi-angle function

Various angles, or viewpoints of the video camera, for a scene are recorded on some DVDs.

Multilingual function

Several languages for the sound or subtitles in a picture are recorded on some DVDs.

Parental Control

A function of the DVD to limit playback of the disc by the age of the users according to the limitation level in each country. The limitation varies from disc to disc; when it is activated, playback is completely prohibited, violent scenes are skipped or replaced with other scenes and so on.

Playback Control (PBC)

Signals encoded on VIDEO CDs (Version 2.0) to control playback.
By using menu screens recorded on VIDEO CDs with PBC functions, you can enjoy playing simple interactive programmes, programmes with search functions, and so on.

continued

Region Code

This system is used to protect copyrights. A region number is allocated on each DVD system or DVD disc according to the sales region. Each region code is shown on the system as well as on the disc packaging. The system can play the discs that match its region code. The system can also play discs with the " " mark. Even when the region code is not shown on the DVD, the region limit may still be activated.

Scene

On a VIDEO CD with PBC (playback control) functions, the menu screens, moving pictures and still pictures are divided into sections called "scenes."

Super Audio CD

This audio format is based upon the current audio CD standards but includes a greater amount of information which provides higher quality sound. There are three types of discs: single layer, double layer and hybrid discs. The hybrid disc contains both standard audio CD and Super Audio CD information.

Title

The longest sections of a picture or music feature on a DVD, movie, etc., in video software, or the entire album in audio software.

Track

Sections of a picture or a music piece on a Super Audio CD, CD, VIDEO CD or MP3. An album is composed of several tracks (MP3 only).

VIDEO CD

A compact disc that contains moving pictures.
The picture data uses the MPEG 1 format, one of the worldwide standards of digital compression technology. The picture data is compressed to about 1/140 of its original size. Consequently, a 12 cm VIDEO CD can contain up to 74 minutes of moving pictures. VIDEO CDs also contain compact audio data. Sounds outside the range of human hearing are compressed while the sounds we can hear are not compressed. VIDEO CDs can hold 6 times the audio information of conventional audio CDs.
There are 2 versions of VIDEO CDs.

- Version 1.1: You can play only moving pictures and sounds.
- Version 2.0: You can play high-resolution still pictures and enjoy PBC functions.

This system conforms to both versions.

Specifications

Amplifier section

Stereo mode	100 W + 100 W (4 ohms at 1 kHz, THD 10 %)
Surround mode	Front: 100 W + 100 W Center*: 100 W (4 ohms at 1 kHz, THD 10 %) Rear*: 100 W + 100 W (4 ohms at 1 kHz, THD 10 %) Subwoofer*: 100 W+ 100 W (4 ohms at 100 Hz, THD 10 %)

* *Depending on the sound field settings and the source, there may be no sound output.*

Output (Analogue)	PHONES: Accepts low- and high-impedance headphones

Super Audio CD/DVD system

Laser	Semiconductor laser (Super Audio CD/DVD: λ = 650 nm) (CD: λ = 780 nm) Emission duration: continuous
Frequency response (at 2 CH STEREO mode)	
	DVD (PCM): 2 Hz to 22 kHz (±1.0 dB) CD: 2 Hz to 20 kHz (±1.0 dB)
Signal-to-noise ratio	More than 80 dB (EURO AV OUTPUT (AUDIO) connectors only)
Harmonic distortion	Less than 0.03 %

FM tuner section

System	PLL quartz-locked digital synthesizer system
Tuning range	87.5 – 108.0 MHz (50 kHz step)
Aerial terminals	75 ohms, unbalanced
Intermediate frequency	10.7 MHz
Aerial	FM wire aerial

AM tuner section

System	PLL quartz-locked digital synthesizer system
Tuning range	531 – 1,602 kHz (with the interval set at 9 kHz)
Intermediate frequency	450 kHz
Aerial	Loop aerial

Tuner

Dimensions (approx.)	110 × 180 × 110 mm (w/h/d)
Mass (approx.)	0.3 kg

EURO AV jack

Audio section

Input (Analogue)	EURO AV INPUT (FROM VIDEO): Voltage: 0.5 V Impedance: More than 10 kilohms
Output (Analogue)	EURO AV OUTPUT (TO TV): Voltage: 0.5 V Impedance: Less than 1 kilohm

continued

Video section

Input	EURO AV video: 1 Vp-p 75 ohms
Output	EURO AV video: 1 Vp-p 75 ohms EURO AV RGB:R,G,B: 0.7 Vp-p 75 ohms

Control unit

Dimensions (approx.)	324 × 342 × 245 mm (w/h/d)
Mass (approx.)	3.1 kg

Speakers

Front/Rear

Speaker system	Bass reflex
Speaker unit	78 mm dia. cone type × 2, 25 mm dia. hard dome
Rated impedance	4 ohms
Dimensions (approx.)	140.5 × 1,250 × 108 mm (w/h/d) (Base: 300 × 300 mm)
Mass (approx.)	8.4 kg (Front) 9.4 kg (Rear)

Center

Speaker system	Bass reflex
Speaker unit	78 mm dia. cone type × 2, 25 mm dia. hard dome
Rated impedance	4 ohms
Dimensions (approx.)	561 × 141 × 145 mm (w/h/d)
Mass (approx.)	2.8 kg

Subwoofer

Speaker system	Bass reflex
Speaker unit	180 mm dia. cone type
Rated impedance	4 ohms
Dimensions (approx.)	366 × 615 × 636 mm (w/h/d)
Mass (approx.)	23.5 kg

General

Power requirements	230 V AC, 50/60 Hz
Power consumption	225 W 1.5 W (at the Power Saving Mode)
Operating temperature	5˚C to 35˚C
Operating humidity	25 % to 80 %
Supplied accessories	See page 17.

Design and specifications are subject to change without notice.

Language Code List

For details, see pages 50, 57, 70.
The language spellings conform to the ISO 639: 1988 (E/F) standard.

Code	Language
1027	Afar
1028	Abkhazian
1032	Afrikaans
1039	Amharic
1044	Arabic
1045	Assamese
1051	Aymara
1052	Azerbaijani
1053	Bashkir
1057	Byelorussian
1059	Bulgarian
1060	Bihari
1061	Bislama
1066	Bengali; Bangla
1067	Tibetan
1070	Breton
1079	Catalan
1093	Corsican
1097	Czech
1103	Welsh
1105	Danish
1109	German
1130	Bhutani
1142	Greek
1144	English
1145	Esperanto
1149	Spanish
1150	Estonian
1151	Basque
1157	Persian
1165	Finnish
1166	Fiji
1171	Faroese
1174	French
1181	Frisian
1183	Irish
1186	Scots Gaelic
1194	Galician
1196	Guarani
1203	Gujarati
1209	Hausa
1217	Hindi
1226	Croatian
1229	Hungarian
1233	Armenian
1235	Interlingua
1239	Interlingue
1245	Inupiak
1248	Indonesian
1253	Icelandic
1254	Italian
1257	Hebrew
1261	Japanese
1269	Yiddish
1283	Javanese
1287	Georgian
1297	Kazakh
1298	Greenlandic
1299	Cambodian
1300	Kannada
1301	Korean
1305	Kashmiri
1307	Kurdish
1311	Kirghiz
1313	Latin
1326	Lingala
1327	Laothian
1332	Lithuanian
1334	Latvian; Lettish
1345	Malagasy
1347	Maori
1349	Macedonian
1350	Malayalam
1352	Mongolian
1353	Moldavian
1356	Marathi
1357	Malay
1358	Maltese
1363	Burmese
1365	Nauru
1369	Nepali
1376	Dutch
1379	Norwegian
1393	Occitan
1403	(Afan)Oromo
1408	Oriya
1417	Punjabi
1428	Polish
1435	Pashto; Pushto
1436	Portuguese
1463	Quechua
1481	Rhaeto-Romance
1482	Kirundi
1483	Romanian
1489	Russian
1491	Kinyarwanda
1495	Sanskrit
1498	Sindhi
1501	Sangho
1502	Serbo-Croatian
1503	Singhalese
1505	Slovak
1506	Slovenian
1507	Samoan
1508	Shona
1509	Somali
1511	Albanian
1512	Serbian
1513	Siswati
1514	Sesotho
1515	Sundanese
1516	Swedish
1517	Swahili
1521	Tamil
1525	Telugu
1527	Tajik
1528	Thai
1529	Tigrinya
1531	Turkmen
1532	Tagalog
1534	Setswana
1535	Tonga
1538	Turkish
1539	Tsonga
1540	Tatar
1543	Twi
1557	Ukrainian
1564	Urdu
1572	Uzbek
1581	Vietnamese
1587	Volapük
1613	Wolof
1632	Xhosa
1665	Yoruba
1684	Chinese
1697	Zulu
1703	Not specified

DVD Setup Menu List

You can set the following items with the DVD setup menu.
The order of the displayed items may be different from the actual display.

LANGUAGE SETUP

- OSD — (Selects the language you want to use from the displayed language list.)
- DVD MENU — (Selects the language you want to use from the displayed language list.)
- AUDIO — (Selects the language you want to use from the displayed language list.)
- SUBTITLE — (Selects the language you want to use from the displayed language list.)

CUSTOM SETUP

- PARENTAL CONTROL
  - LEVEL
    - OFF
    - 8.
    - 7. NC17
    - 6. R
    - 5.
    - 4. PG13
    - 3. PG
    - 2.
    - 1. G
  - STANDARD
    - USA
    - OTHERS→
  - CHANGE PASSWORD
- TRACK SELECTION
  - OFF
  - AUTO
- 2CH MODE
  - PRO LOGIC II MOVIE
  - PRO LOGIC II MUSIC
  - PRO LOGIC
- AUDIO OUTPUT
  - OFF
  - ON
- AUDIO DRC
  - OFF
  - ON

SCREEN SETUP

- TV TYPE
  - 16:9
  - 4:3 LETTER BOX
  - 4:3 PAN SCAN
- SCREEN SAVER
  - ON
  - OFF
- BACKGROUND
  - JACKET PICTURE
  - GRAPHICS
  - BLUE
  - BLACK
- LINE
  - VIDEO
  - RGB

SPEAKER SETUP

- SIZE
  - FRONT — YES
  - CENTER
    - YES
    - NONE
  - REAR
    - BEHIND
    - SIDE
    - NONE
  - SUBWOOFER — YES
- DISTANCE
  - FRONT — 1.0m ~15m
  - CENTER — 0m ~15m
  - REAR — 0m ~15m
- LEVEL
  - CENTER — –6 dB ~ +6 dB
  - REAR — –6 dB ~ +6 dB
  - SUBWOOFER — –6 dB ~ +6 dB
- BALANCE
  - FRONT — 6 steps left or right
  - REAR — 6 steps left or right
- CONNECT — REAR
  - WIRELESS
  - WIRED
- TEST TONE
  - OFF
  - ON

RESET

- YES

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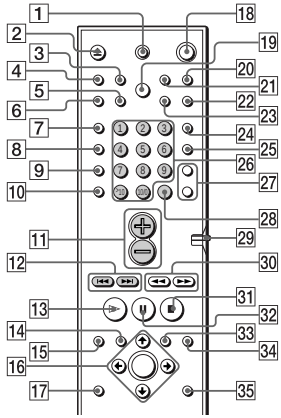
Quick Reference for Remote Commander



Shaded parts buttons are affected by the COMMAND MODE DVD/TV switch. Shaded descriptions refer to TV setting on the switch.

Note

The remote control of the unit employs command signals in common with other Sony DVD products.
Thus, depending on the button, other Sony DVD products may respond.

1 **TV I/⏻ (on/standby)**
Turns the TV on and off.

2 **⏏ (open/close)**
Ejects the disc.

3 **NAME**
Activates the name function.

4 **STEREO/MONO**
Switches monaural or stereo of FM stereo reception.

5 **MEMORY**
Press to store a preset station.

6 **CLEAR**
Press to return to the Continuous play, etc.

7 **PLAY MODE**
Selects programme or shuffle play mode.

8 **AUDIO**
Changes the sound while playing a DVD or VIDEO CD.

9 **ANGLE**
Changes the angles when playing a DVD.

10 **SUBTITLE**
Displays the "SUBTITLE" menu in the Control Menu display.

11 **VOL +/–**
Adjust the SYSTEM volume. TV : Adjust the TV volume.

12 **I◄◄ /►►I, PREV/NEXT, TV CH –/+, PRESET –/+**
I◄◄ / ►►I PREV / NEXT : Press to go to the next chapter or track or to go back to the previous chapter or track.
PRESET – / + : Scan all preset stations.
TV CH – / + : Select the TV Channel

13 **▻ PLAY/SELECT**
Plays a disc.

14 **DVD TOP MENU**
Displays the title menu on the TV screen.

15 **DVD DISPLAY**
Displays the Control Menu display on the TV screen to set or adjust the items.

16 **←/↑/↓/→/ENTER**
Selects and executes the items or settings.

17 **DVD SETUP**
Displays the setup display on the TV screen to set or adjust the items.

18 **⏻ (standby)**
Turns on and off the power of the system.

19 **DIMMER**
Changes the brightness of the front panel display by two steps.

20 **TV/VIDEO**
Changes the input mode of the TV.

21 **REPEAT**
Displays the "REPEAT" display on the TV screen.

22 **MUTING**
Mutes the sound.

23 **TIME**
Displays the playing time of the disc, etc., on the Control Menu.

24 **FUNCTION**
Selects the component you want to use.

25 **BAND**
Selects AM or FM band.

26 **Number buttons***
Selects the items of settings.
TV : Selects channel numbers.

27 **SOUND FIELD** +/–
Selects the sound field.

28 **ENTER**
Executes the items or settings. TV : Press after selecting a channel number

29 **COMMAND MODE DVD/TV switch**
Switches the TV's input source between the TV and DVD.

30 **◄◄/►►, ◄❙/❙► SLOW, TUNING –/+**
◄◄ / ►► (SCAN) : Locate a point while monitoring the picture while playing disc.
◄❙/❙► SLOW : Play a disc in slow motion in the pause mode.
TUNING – / + : Scan all available radio stations.

31 **■ STOP**
Stops playing a disc.

32 **❚❚ PAUSE**
Pauses playing a disc.

33 **DVD MENU**
Displays the DVD menu on the TV screen.

34 **↩ RETURN**
Press to return to the previously selected screen, etc.

35 **DISPLAY**
Displays the sound field on the TV screen.

* Depending on the TV set, you can also enter the number as follows:
Press >10, then the number. (For example, press >10, then 2 and 5 for entering 25.)

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